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Digital LCD Combi TV

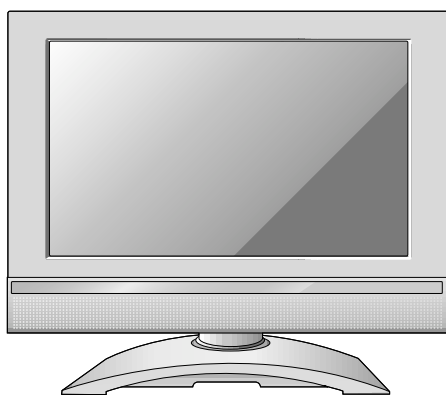
SERVICE MANUAL

CHASSIS : ML-027B

MODEL : KZ-17LZ21

CAUTION

BEFORE SERVICING THE CHASSIS,
READ THE SAFETY PRECAUTIONS IN THIS MANUAL.



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PRODUCT SAFETY

IMPORTANT SAFETY NOTICE

This manual was prepared for use only by properly trained audiovisual service technicians. When servicing this product, under no circumstances should the original design be modified or altered without permission from LG Electronics Inc. All components should be replaced only with types identical to those in the original circuit and their physical location, wiring, and lead dress must conform to original layout upon completion of repairs. If any fuse (or Fusible Resistor) in this TV receiver is blown, replace it only with the factory specified fuse type and rating. When replacing a high wattage resistor (Oxide Metal Film Resistor, over 1W), keep the resistor 10mm away from PCB. Always keep wires away from high voltage or high temperature parts.

Special components are also used to prevent shock and fire hazard.

These components are indicated by the letter "x" included in their component designators and are required to maintain safe performance. No deviations are allowed without prior approval by LG Electronics Inc. Service work should be performed only after you are thoroughly familiar with these safety checks and servicing guidelines.

Circuit diagrams may occasionally differ from the actual circuit used.

This way, implementation of the latest safety and performance improvement changes into the set is not delayed until the new service literature is printed.

CAUTION: Do not attempt to modify this product in any way.

Never perform customized installations without manufacturer's approval.

Unauthorized modifications will not only void the warranty, but may lead to property damage or user injury.

GENERAL GUIDANCE

An Isolation Transformer should always be used during the servicing of a receiver whose chassis is not isolated from the AC power line. Use a transformer of adequate power rating to protect against personal injury from electrical shocks. It will also protect the receiver and its components from being damaged by accidental shorts of the circuitry that may be inadvertently introduced during the service operation.

Before returning the receiver to the customer, always perform an AC leakage current check on the exposed metallic parts of the cabinet, such as antennas, terminals, etc., to be sure the set is safe to operate without damage of electrical shock.

LEAKAGE CURRENT COLD CHECK (ANTENNA COLD CHECK)

With the instrument's AC plug removed from AC source, connect an electrical jumper across the two AC plug prongs. Place the AC switch in the on position, connect one lead of ohm-meter to the AC plug prongs tied together, and touch other ohm-meter lead in turn to each exposed metallic parts such as antenna terminals, phone jacks, etc. If the exposed metallic part has a return path to the chassis, the measured resistance should be between 1M Ω and 5.2M Ω . When the exposed metal has no return path to the chassis the reading must be infinite. Any other abnormality that exists must be corrected before the receiver is returned to the customer.

ELECTROSTATICALLY SENSITIVE DEVICES

Some semiconductor (solid-state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on the body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as an ESD mat, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charge sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil, or comparable conductive material.)
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

Caution: Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise, seemingly harmless motion, such as the brushing together of your clothing or the lifting of your foot from a carpeted floor, can generate static electricity sufficient to damage an ES device.)

SPECIFICATION

NOTE : Specifications and others are subject to change without notice for improvement.

1. Application range

This specification is applied to ML-027C chassis.

2. Requirement for Test

Testing for standard of each part must be followed in below condition.

- (1) Temperature: 25°C ± 5°C
- (2) Humidity: 65% ± 10%
- (3) Power: Standard input voltage (AC 100-240V, 50/60Hz)
- (4) Measurement must be performed after heat-run more than 15min.
- (5) Adjusting standard for this chassis is followed a special standard.

3. Test and Inspection method

- (1) Capacity: Follow LG electronics TV Testing Standard.
- (2) Another Required Standard
- EMI: Following CE Standard(EN55020,EN55013)
- SAFETY: Following CB Standard(EN60065)

4.General Specification(TV)

No.	Item	Specification	Remark
1	Video input applicable system	1)PAL-D/K,B/G,I 2)NTSC-M 3)PAL-I 4)SECAM NTSC 4.43'	
2	Receivable broadcasting system	1)PAL/SECAM BG 2)PAL/SECAM DK 3)PAL I/I 4)SECAM L/L' 5)NTSC M	EU/Non-EU (PAL Market)
		6)PAL-N/M 7)NTSC M	NTSC Market
3	RF input channel	VHF : E2 ~ E12 UHF : E21 ~ E69 CATV : S1 ~ S20 HYPER : S21 ~ S41	PAL
		L/L' : B,C,D	FRANCE
		VHF : 2 ~ 13 UHF : 14 ~ 69 CATV : 1 ~ 125 HYPER : S21 ~ S41	NTSC
		V/UHF : 1 ~ 62 CATV : C13 ~ C38	JAPAN
4	Input voltage	AC 100 - 240V/ 50Hz,60HZ AC 100 - 240V/50Hz AC 100V,50/60Hz	Non-EU, Latin America, EU Japan, USA
5	Picture size	584.40 mm	23.01"
6	Tuning system	FVS 100 program FS	PAL, 200PR.(Option) NTSC
7	Operating environment	1)Temp : 0 ~ 40 deg 2)Humidity : 85%	
8	Storage environment	3)Temp : -20 ~ 60 deg 4)Humidity : 85%	
9	Display	LCD Module	LG-PHILPS

5.General Specification(Monitor)

No.	Item	Specification			Unit	Remark
1	Panel	23.01" (17.1") wide TFT WXGA LCD				
2	Frequency range	H:31 ~ 61KHz, V: 56 ~ 85Hz				
3	D-SUB Pin configuration	1: RED 3: BLUE 5: S.T(GND) 7: Green GND 9: N.C 11: ID0(GND) 13: H-Sync 15:SCL	2: Green 4: ID2(GND) 6: RED GND 8: Blue GND 10: D-GND 12: SDA 14:V-Sync Shell: GND			10: Digital GND
4	Control function	1) Contrast/ Brightness 2) H- Position/ V-Position 3) Tracking : Clock/Phase 4) Auto Configure				
5	D4 Jack (525i,525p,750p,1125i)	1: Y 3: Pb 5: Pr 7: Line1 Ready 9: LINE2 11: LINE3 13: Line3 Ready 2: Y GND 4: Pb GND 6: Pr GND 8: LINE1 10: Line2 Ready 12: SWITCH GND 14: SWITCH				Japan only
6	Response time(TYP/MAX)	1) Rising Time: 12(17"),13(23")			ms	
		2) Fall Time: 13(17"),12(23")			ms	
7		H/V-Sync	Video	Power consumption		LED
	Power ON	ON/ON	Active	≤ 67(17"),90(23")	W	Green
	Stand by	OFF/ON	OFF	≤ 3.0	W	Red
	DPMS Mode	ON/OFF	OFF	≤	W	Amber
	Power off	-	-	-	W	**.
8	LCD Module	Type	Color Active Matrix TFT			
		Size	23.01" wide(584.40mm) 17.1" wide(434.38mm)			23 inch 17 inch
		Pixel Pitch	0.1305mm X 0.3915mm 0.291mm X 0.291mm			23 inch 17 inch
		Pixel Format	1280 X 768 Pixels RGB Stripe Matrix			
		Active Video Area	501.12mm X 300.67mm 400mm X 258			23 inch 17 inch
		Coating	Anti Glare Hard coating(3H)			
		Back Light	6CCFL (Cold Cathode Fluorescent Lamp)			

6.Feature and Function

No.	Item	Specification	Remark
1	Teletext	TOP, FLOF, LIST 10 page	Top(option)
2	REMOCON	NEC code	PAL/NTSC
3	AV input	2	Side and Rear
4	S-AV input	1	Side
5	Component input	1	Rear(option)
6	PERI TV connector	Full SCART: 1	Rear(Option,EU)
7	RGB input	1	D-Sub 15 pin
8	D-sub audio input	1	Stereo
9	2 Carrier stereo	BG,DK	
10	NICAM stereo	BG,I,LL'	
11	2 Carrier dual	BG,DK	
12	NICAM dual	BG,I,LL'	
13	DW(Double Window) mode	O	
14	MW(Multi Window) mode	O	
15	Film mode	O	
16	Noise reduction	X	
17	Progressive scan	O	
18	Motion detection	O	
19	Dolby virtual	O	
20	Swivel Speaker	X	
21	EZ-pip	O	

7.General Specification (DVD)

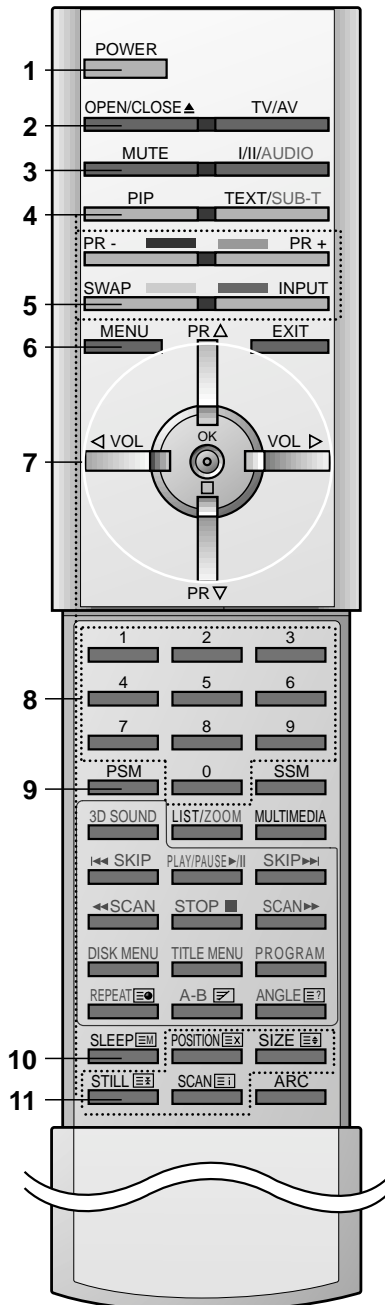
No.	Item	Specification	Remark
1	Video/Audio read,decoding and converting applicable system	DVD Video(Single/Double layer),DVD-R/RW, DVD+R/RW, Video CD,CVD, SVCD, CD-R/RW, CD-Audio,MP3 Audio CD Digital Audio (CD TEXT)	
2	Mechanism	1)Slim Dimensional DVD loader 2)Disc loading mororized 3) Electronics anti-vibration servo system 4) Optical pick-up driver 5) Roller loading and eject system 6) Detect disc present using mechanical switch 7)DTS,Dolby surround	
3	Maximum storage capacities	4.7 Gbytes and 17.08 Gbytes for dual layer/dual side	
4	Protections	second disc insertion protect	
5	Input voltage	8V/ 5V/ 3.3V DC	
6	Video out	CVBS video out Component vide out (Y,Pb,Pr)	
7	Audio out	SPDIF digital audio out	
8	Dimension	(W x H x D: 143.0 x 23 x 128.4mm)	
9	Operating Environment	1) Temp: -20 ~ 70 deg 2) Humidity: Under 80%	
10	Storage Environment	1) Temp: -40 ~ 85 deg 2) Humidity: Under 90%	

DESCRIPTION OF CONTROLS

All the functions can be controlled with the remote control handset. Some functions can also be adjusted with the buttons on the front panel of the set. Only the remote control handset supplied will operate this set.

Remote control handset

Before you use the remote control handset, please install the batteries. See the next page.



1. **POWER**
switches the set on from standby or off to standby.
2. **OPEN/CLOSE**
Open or close the disc tray.
3. **MUTE**
switches the sound on or off.
4. **PIP BUTTONS (option)**
PIP
switches the sub picture on or off.
PR +/-
selects a programme for the sub picture.
SWAP
alternates between main and sub picture.
INPUT
selects the input mode for the sub picture.
SIZE
adjusts the sub picture size.
STILL
freezes motion of the sub picture.
POSITION
relocates the sub picture in up/down or left/right direction.
SCAN
switches on the programme scan mode through 3/12 sub pictures and 9 main pictures.
5. **SWAP**
returns to the previously viewed programme.
selects a favourite programme.
6. **MENU**
selects a menu.
7. **D / E (Programme Up/Down)**
selects a programme or a menu item.
switches the set on from standby.
F / G (Volume Up/Down)
adjusts the volume.
OK
accepts your selection or displays the current mode.
8. **NUMBER BUTTONS**
switches the set on from standby and selects a programme.
9. **PSM (Picture Status Memory)**
recalls your preferred picture setting.
10. **SLEEP**
sets the sleep timer.
11. **STILL (option)**
freezes motion of the picture.

12. TV/AV

selects the remote operating mode.
clears the menu from the screen.
switches the set on from standby.

13. I/II/AUDIO (option)

selects the language during dual language broadcast.
selects the sound output (option).
changes the AUDIO status during DVD playback.

14. TELETEXT BUTTONS/SUB-T (option)

These buttons are used for teletext.
For further details, see the 'Teletext' section.
changes the subtitle language during DVD playback.

15. EXIT

exits from each mode.

16. SSM (Sound Status Memory)

recalls your preferred sound setting.

17. MULTIMEDIA

selects DVD or PC monitor mode.
clears the menu from the screen.
switches the set on from standby.

18. LIST/ZOOM (option)

displays the programme table.
changes the picture size during DVD playback.

19. DVD BUTTONS

controls a LG DVD player.
For further details, see the 'DVD Operation' section.

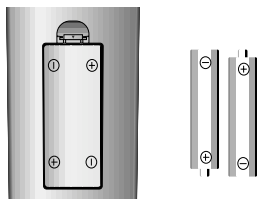
20. ARC

select your desired picture format.

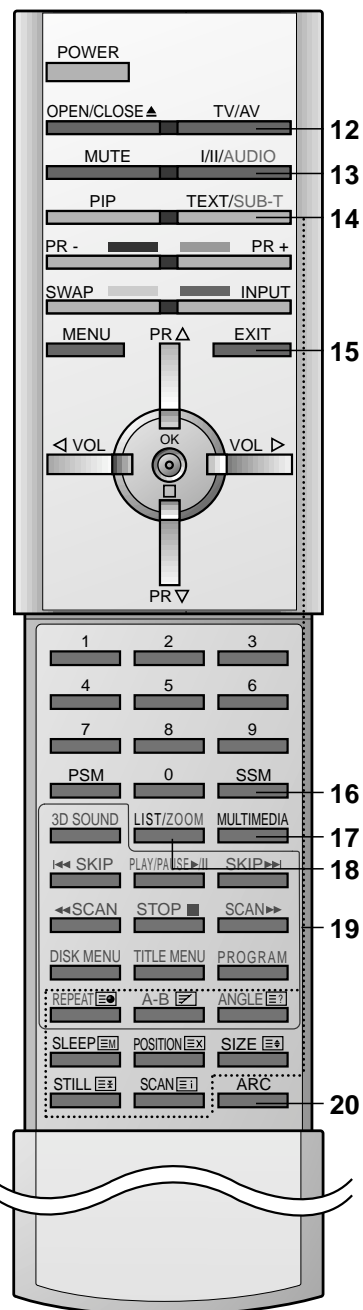
Note : In teletext mode, the **PR +/-**, **SWAP** and **INPUT** buttons are used for teletext function.

Battery installation

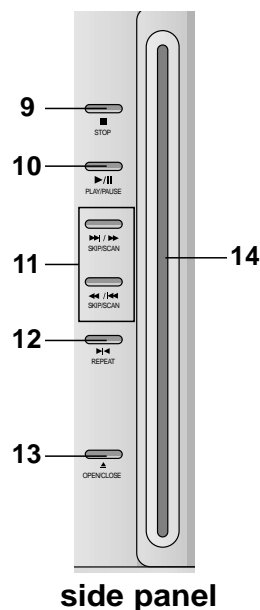
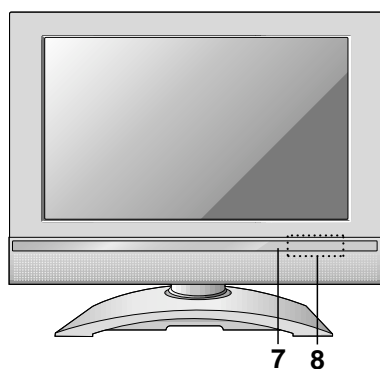
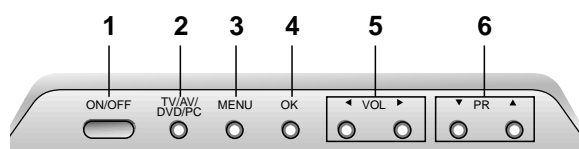
The remote control handset is powered by two AAA type batteries. To load the batteries, turn the remote control handset over and open the battery compartment. Install two batteries as indicated by the polarity symbols (+ and -) marked inside the compartment.



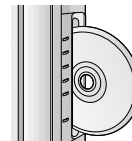
Note : To avoid damage from possible battery leakage, remove the batteries if you do not plan to use the remote control handset for an extended period of time.



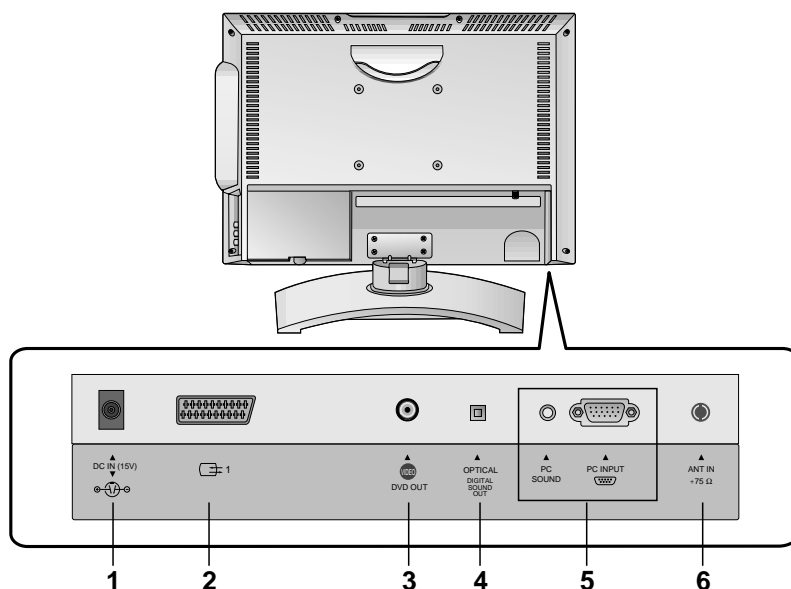
Top panel



1. **ON/OFF**
switches the set on from standby or off to standby.
Note : Power line lives even when the power is off.
2. **TV/AV//DVD/PC**
selects the remote operating mode.
clears the menu from the screen.
switches the set on from standby.
3. **MENU**
selects a menu.
4. **OK**
accepts your selection or displays the current mode.
5. **F / G (Volume Up/Down)**
adjusts the volume.
adjusts menu settings.
6. **D / E (Programme Up/Down)**
selects a programme or a menu item.
switches the set on from standby.
7. **REMOTE CONTROL SENSOR**
8. **LED (Light Emitting Diode) DISPLAY**
illuminates brightly when the set is switched on.
 - ⏻ : POWER/STANDBY indicator
 - MONO : MONO indicator
 - STEREO : STEREO indicator
 - DUAL : DUAL indicator
 - DPM : DPM indicator
9. **STOP**
Stops playback.
10. **PLAY/PAUSE**
Start or pause playback.
11. **SKIP/SCAN**
Starts playback from the selected chapter or track.
12. **REPEAT**
Repeat playback.
13. **OPEN/CLOSE**
Open or close the disc tray.
Note : When DISC TRAY doesn't work, press the **OPEN/CLOSE** button on the side panel for a moment.
14. **DISC TRAY**
Place a disc on the disc tray.
Note : Insert a disc after facing a logo-printed side to front. See a figure.



Back panel



1. DC 15V INPUT SOCKET

2. EURO SCART SOCKET (AV1)

3. DVD VIDEO OUT SOCKET

4. DVD DIGITAL SOUND OUT SOCKET

Connect to digital audio from various types of equipment.

5. PC/SOUND INPUT SOCKETS

Connect the monitor output socket of the PERSONAL COMPUTER to this socket.

6. AERIAL SOCKET

7. HEADPHONE SOCKET

Connect the headphone plug to this socket.

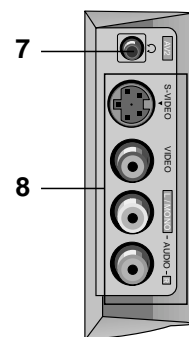
8. AUDIO/VIDEO IN SOCKETS (AV2)

Connect the audio/video out sockets of external equipment to these sockets.

S-VIDEO/AUDIO IN SOCKETS (S-VIDEO)

Connect the video out socket of an S-VIDEO VCR to the **S-VIDEO** socket.

Connects the audio out sockets of the S-VIDEO VCR to the audio sockets as in **AV2**.



Side panel

ADJUSTMENT INSTRUCTION

1. Application Object

This instruction is for the application to the LCD TV.

2. Notes

- (1) This set uses an adapter, so connect the adapter and the set correctly before adjustment.
- (2) The adjustment must be performed under the correct sequence.
- (3) The adjustment must be performed in the circumstance of $25 \pm 5^{\circ}\text{C}$ of temperature and $65 \pm 10\%$ of relative humidity if there is no specific designation.
- (4) The input voltage of the receiver must keep 100~220V, 50/60Hz in adjusting.
- (5) The set must be operated for 15 minutes preliminarily before adjustment if there is no specific designation.

['Heat Run' must be performed with the full white signal or TV noise signal in the internal part of the set.

[The time for 'Heat Run' can be changed owing to production plan.

3. PC Input Mode Adjustment

3-1. Required Test Equipment

- (1) MSPG-925LTH or A pattern generator ;Gray pattern of 16 tones
- (2) A adjustment communicator.

3-2. Preparation for Adjustment

- (1) Perform 'Heat Run' for more than 15 minutes in white pattern.
- (2) Connect the signal of pattern generator with LCD TV.

3-3. Auto Gray Adjustment

- (1) Apply the gray signal of XGA(1024X768) 16 tones by using MSPG-925LTH.
- (2) In Service menu mode, adjust the Auto gray from 0 to 1 by using Vol(+) button.

4. Position of Mode Adjustment

Timing chart of Receivable Mode

* H[dot]/V[line]

Mode	VGA-60	VGA-67	VGA-75	VGA-85	SVGA-56	SVGA-60	SVGA-72	SVGA-75	SVGA-
H_Display	640	640	640	640	800	800	800	800	85800
V_Display	480	480	480	480	600	600	600	600	600
V_Frequency	60	67	75	82	56	60	72	75	85
H_Total	800	864	840	832	1024	1056	1040	1056	1048
H_Blanking	160	224	200	192	224	256	240	256	248
H_Sync	96	64	64	56	72	128	120	80	64
H_Polarity	NEG.	NEG.	NEG	NEG	POS	POS	POS	POS	POS
H_Vp	48	96	120	80	128	88	64	160	152
H_Fp	16	64	16	56	24	40	56	16	32
H-Freq[KHz]	31.469	35.0	37.5	43.269	35.156	37.879	48.077	46.875	53.674
/Clk[MHz]	25.175	30.24	31.5	36.0	36.0	40.0	50.0	49.5	56.25
V_Total	525	525	500	509	62.5	628	666	625	631
V_Blanking	45	45	20	29	25	28	66	25	31
V_Sync	2	3	3	3	2	4	6	3	3
V_Polarity	NEG	NEG	NEG	NEG	POS	POS	POS	POS	POS
V_Bp	33	39	16	25	22	23	23	21	27
V_Fp	10	3	1	1	1	1	37	1	1

Mode	XGA-60	XGA-70	XGA-75	XGA-85	WXGA-50	WXGA-60
H_Display	1024	1024	1024	1024	1280	1280
V_Display	768	768	768	768	768	768
V_Frequency	60	70	75	82	50	60
H_Total	1344	1328	1312	1376	1648	1680
H_Blanking	320	304	288	352	368	400
H_Sync	136	136	96	96	128	136
H_Polarity	NEG	NEG	POS	POS	NEG	NEG
H_Vp	136	144	176	208	184	200
H_Fp	160	24	16	48	56	64
H-Freq[KHz]	48.363	56.476	60.023	68.677	39.518	47.693
/Clk[MHz]	65.0	75.0	78.75	84.997	65.125	80.125
V_Total	806	806	800	808	791	795
V_Blanking	38	38	32	40	23	27
V_Sync	6	6	3	3	7	7
V_Polarity	NEG	NEG	POS	POS	POS	POS
V_Bp	29	29	28	36	15	19
V_Fp	3	3	1	1	1	1

5. EDID(The Extended Display Identification Data)

EDID Table

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
00	00	FF	FF	FF	FF	FF	FF	00	30	E5	D7	3A	01	00	00	00
10	00	0B	01	01	78	1F	17	70	E8	C3	A0	A3	54	4C	97	24
20	14	50	54	BF	E8	80	31	59	3B	D9	45	59	61	59	71	59
30	81	40	81	80	01	01	10	0E	01	01	01	01	01	01	01	01
40	01	01	01	01	01	01	01	01	F9	15	01	01	01	01	01	01
50	01	01	01	01	01	01	01	01	01	01	64	19	00	40	41	00
60	26	30	18	88	36	00	0E	C3	10	00	00	1E	00	00	00	FD
70	00	32	55	1E	46	0D	00	0A	20	20	20	20	20	20	00	C8

6. Option1 data

Option	Code	Function	Remark
200PR	0	100 Program	
	1	200 Program	
TEXT	0	TEXT Off	
	1	TEXT On	
I/II Save	0	CH.Sound Non Memory	
	1	CH.Sound Memory	
Top	0	TOP OFF	
	1	TOP ON	
Scart	0	SCART OFF	
	1	SCART ON	
A2 Ster	0	FM Stereo/Dual	
	1	FM Mono	
System	0	GB/I/DK/M	
	1	GB/I/DK/L	
	2	Reserved	
	3	Reserved	

7. Option2 data

Option	Code	Function	Remark
PIP Text	0	PIP Text	
	1	PIP Text not display	
ACMS	0	ACMS On	
	1	ACMS Off	
VOL	0	OFF	
	1	Middle Asia Vol On	
HDEV	0	HDEV Off	
	1	HDEV ON	
OSD Lang.	0	Eng.only	
	1	Eng/Deut/Fran/Ital/Esp	
	2	2	
	3	6(EU5+Netherlands)	
	4	4	

Option	Code	Function	Remark
OSD Lang.	5	11	
	6	7	
	7	Reserved	

8. Option3 data

Option	Code	Function	Remark
IIC AFT	0	IIC AFT Off	
	1	IIC AFT On	
MD SAve	0	MD Save On	
	1	MD Save Off	
Mono	0	Mono Off	
	1	Mono On	
CH+Aus	0	OFF	
	1	China,Australia On	
TXT-Lan	0	West EU	
	1	East EU1	
	2	Turky EU	
	3	East EU2	
	4	Cyrillic 1	
	5	Cyrillic 2	
	6	Cyrillic 3	
	7	TURK GRE 1	
	8	TURK GRE 2	
	9	TURK GRE 3	
	10	ARAB FRAN	
	11	ARAB ENG	
	12	ARAB HEB 1	
	13	ARAB HEB 2	
	14	FARSI ENG	
	15	FARSI FRA	
	16	FARSI ALL	

TROUBLESHOOTING

1. General Features

No.	Symptom	Cause	Check Point
1	No screen	Input error of inverter connector	1) Bend the pin legs of P1 connector -> recheck them 2) Check and repair F804.
		P704 connector being slipped out	1) Check and fix P704 connector 2) Check and fix the components at P704 LCD module and at main board. 3) Check Pin21.
		Cracked components and soldering at tuner board	Check and repair tuner board and main board
2	Dark screen	1) Defective LCD lamp 2) Defective inverter 3) Input error of inverter connector	1) Replace the inverter 2) Replace the LCD lamp 2) Check the connector input.

2. PC Mode

No.	Symptom	Cause	Check Point
1	Screen noise	Clock or phase being not able to be adjusted.	1) Resetting is needed according to the video card of each PC. 2) Horizontal noise : adjust phase until no horizontal noise occurs. 3) Vertical noise : adjust clock in menu until no vertical noise occurs.
2	Screen position error	Screen position error horizontally or vertically	1) Play the Auto Configure in Menu. 2) Adjust horizontal and vertical position until the screen displays normally.
3	Color beat noise	Soldering D-SUB Jack of JA202 and IC202.	Recheck and repair JA202, IC202

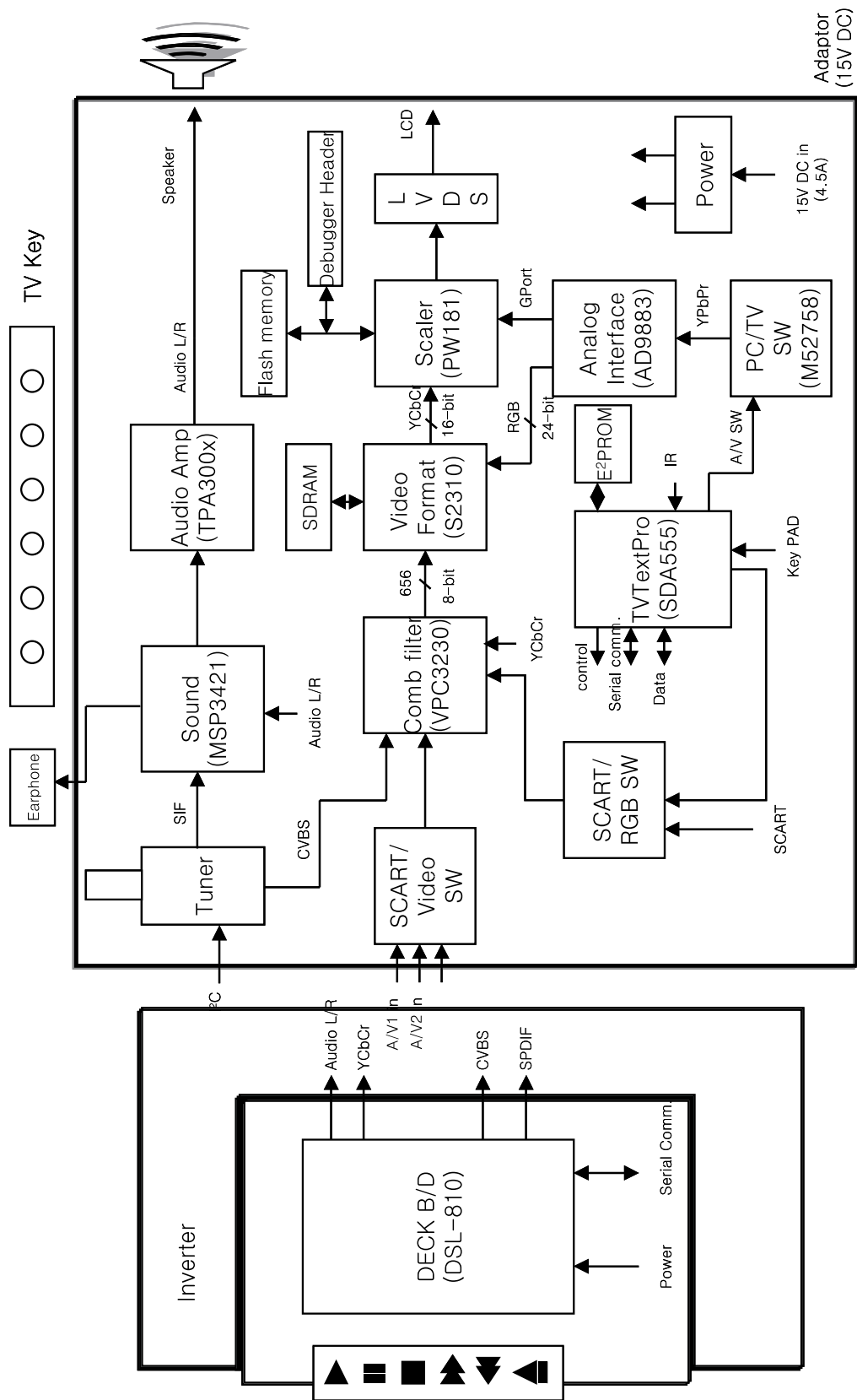
3. TV and external input

No.	Symptom	Cause	Check Point
1	No sound - Speaker - Earphone	Defective Reset IC of IC604. Defective MSP3411 of IC601. Defective B+(8V,5V) of IC603.	1) Check volume and speaker. - Sound comes out only when being inputted into Audio L/R. 2) Check after replacing IC604. 3) Replace IC601. 4) Check and replace B+ of IC603.
2	Video color beat noise	Earphone shield case being touched.	Check the mould of shield and SJ209, Replace shield case.
		Soldering IC301 and IC510.	Re-soldering

4 . DVD Mode

No.	Symptom	Check Point
1	When the KEY of DVD is not working:	1)Check the P801.
2	When the LOGO screen can't display:	2)Check the 28PFFC cable.
3	When you can't insert the DVD title: When you can't see the screen:	3)Check the 8P power cable.
4		If you can't operate it after check the above status, replace the DVD DECK.

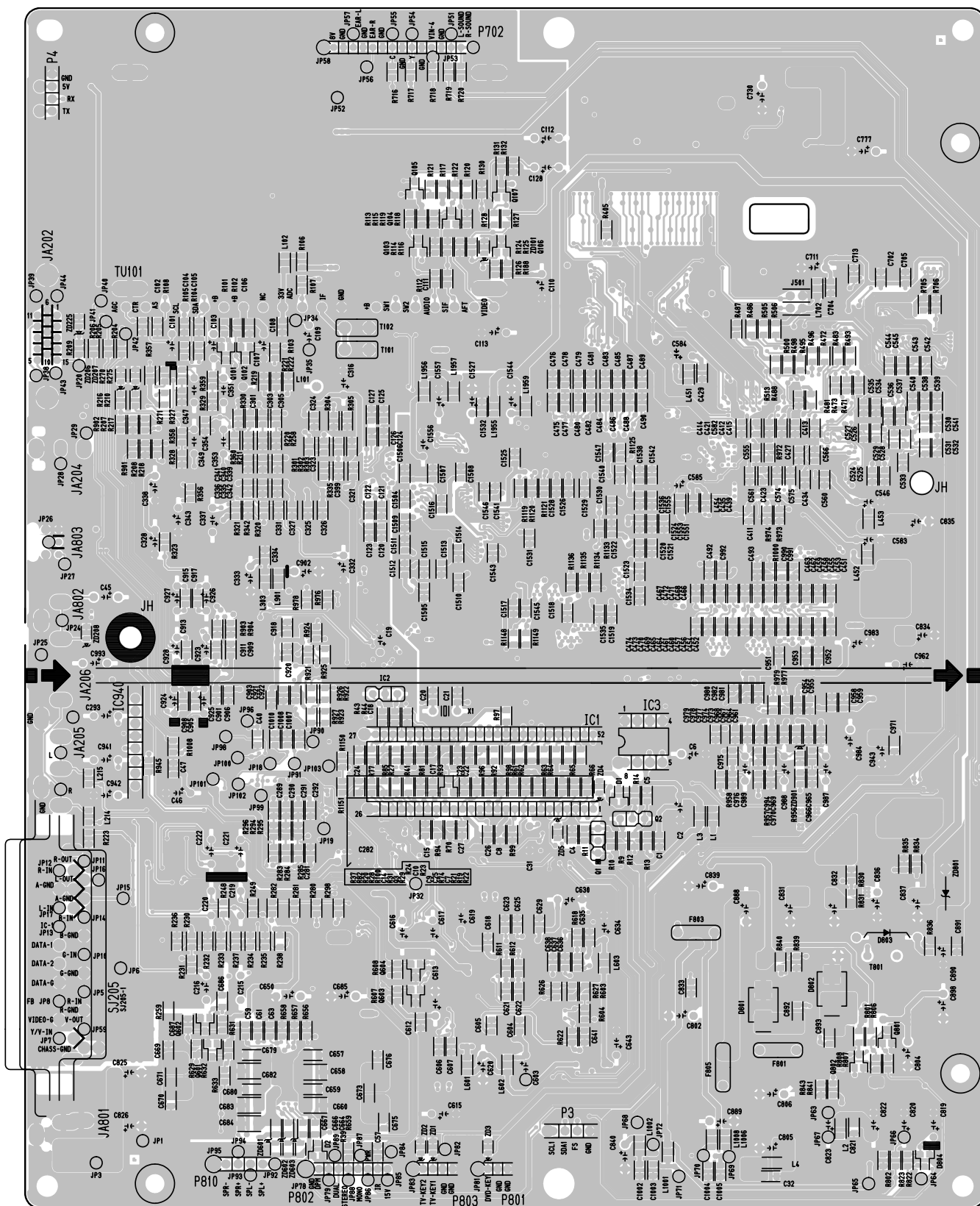
BLOCK DIAGRAM



MAIN(TOP)



MAIN(BOTTOM)



①

OPEN/CLOSE R2001 R2002 R2003 R2004 R2005 STOP

REPEAT SKIP/SEARCH- SKIP/SEARCH+ PLAY/PAUSE

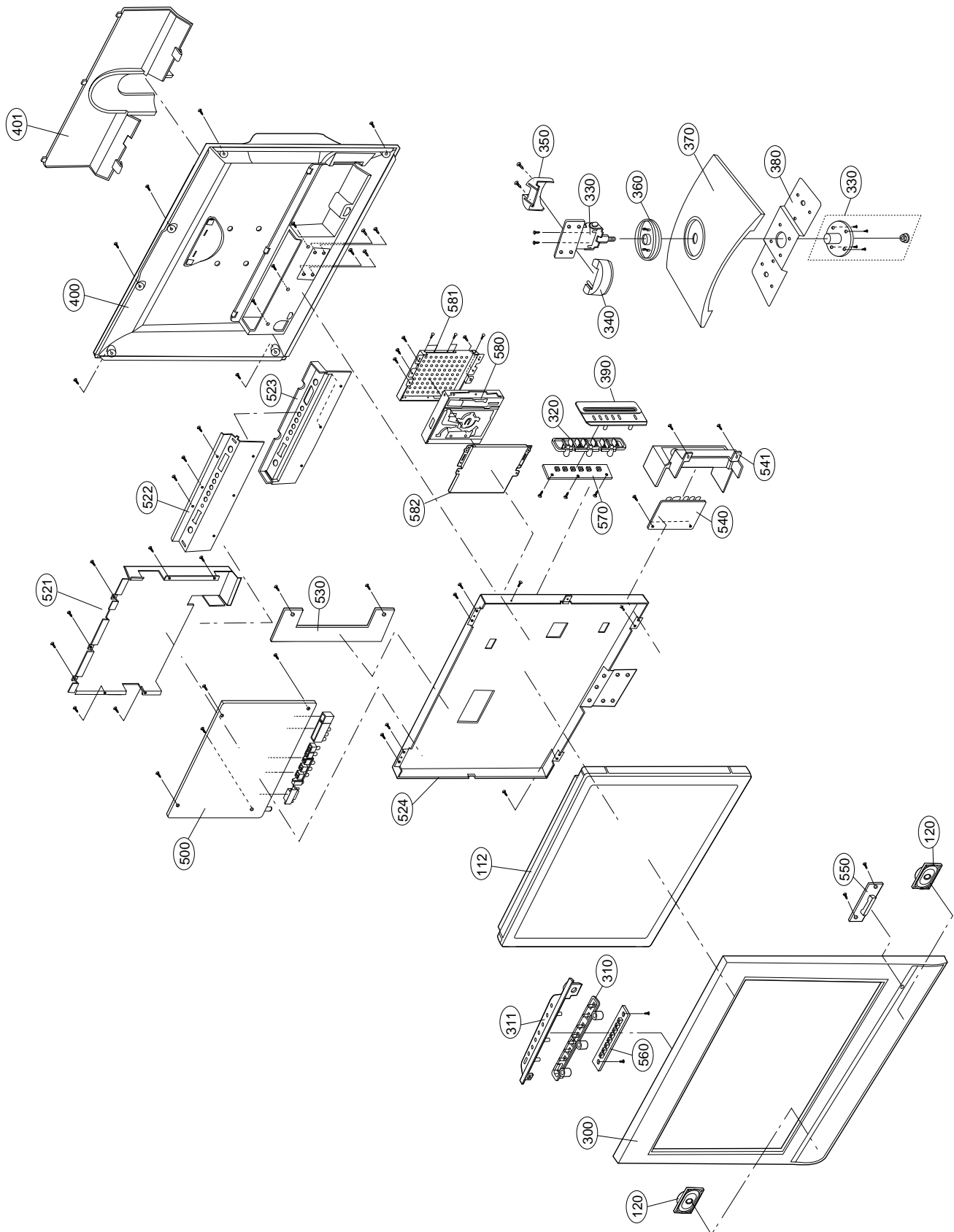
ML-027B
030725 J.Y.B
6870VS1634A(0)

SW2001 P2001 SW2002 SW2003 SW2004 SW2005 SW2006

Diagram of the front panel of the ML-027B VCR. The panel includes controls for POWER, TV/VIDEO, MENU, OK, VOL-, VOL+, PR-, and PR+. The diagram also shows the location of various components like SW2108, SW2107, SW2106, SW2105, SW2104, SW2103, SW2102, SW2101, R2106, R2105, R2104, R2103, R2102, R2101, and P2101. The part number ML-027B and the date code 6870VS1635B(11) 030820 J.Y.B are also indicated.

MEMO

EXPLODED VIEW



EXPLODED VIEW PARTS LIST

No.	PART NO.	DESCRIPTION
112	6306V17001A	LCD MODULE,LC171W03-A4 LG PHILIPS TFT COLOR TFT LCD MODULE
120	6400GKTX01A	SPEAKER,FULLRANGE,8OHM 7/12W 83DB OTHERS 34.5X71
300	3091V00535B	CABINET ASSEMBLY,KZ-17LZ21 NON ML027C .
310	5020V00798A	BUTTON,CONTROL 17LZ20 ABS 8KEY NON
311	4810V00836H	BRACKET,CONTROL KZ-17LZ21 ML027B ABS, HF-380 .
320	5020V00799A	BUTTON,CONTROL 17LZ21 ABS NON NON
330	4950V00157A	METAL,STAND NON HINGE ASSY_15LA60
340	4810V00777A	BRACKET,STAND 15LA60 ML012B NON HINGE FRONT
350	4810V00778A	BRACKET,STAND 15LA60 ML012B NON HINGE COVER
360	4810V00776A	BRACKET,DECO 15LA60 ML012B NON STAND DECO.
370	4810V00779A	BRACKET,STAND 15LA60 ML012B NON BASE
380	4950V00135A	METAL,STAND NON BASE, 15LA60
390	4810V00837A	BRACKET,CONTROL 17LZ21 NON NON NON
400	3809V00371S	BACK COVER ASSEMBLY,KZ-17LZ21 1SCART 407AF
401	3550V00335A	COVER,REAR AV 17LZ20 ABS, HF-380 NON
500	6871VMMR40A	PWB(PCB) ASSEMBLY,MAIN ML-027B MANUAL ASSY
521	4950V00168B	METAL,SHIELD NON FOR DVD
522	4950V00191B	METAL,SHIELD NON
523	4810V00896A	BRACKET,REAR AV 17LZ20 NON NON .
524	4950V00167B	METAL,FRAME EGI .
530	6633VA0003R	INVERTER ASSEMBLY,15V NON ECT 6LAMP CIU11-K004 KOREA
540	6871VSMW84A	PWB(PCB) ASSEMBLY,SUB A/V ML027B KZ-17LZ21 SIDE A/V MANUAL
541	4810V00838F	BRACKET,AV KZ-17LZ21 ML027B ABS, HF-380 .
550	6871VSMW87A	PWB(PCB) ASSEMBLY,SUB LED ML027B KZ-17LZ21 INDEX MANUAL
560	6871VSMW86A	PWB(PCB) ASSEMBLY,SUB CTL ML027B KZ-17LZ21 TV CONTROL
570	6871VSMW85A	PWB(PCB) ASSEMBLY,SUB CTL ML027B KZ-17LZ21 DVD CONTROL
580	4405V00002A	DVD-ROM,DSV-810 DVS KOREA ML027B
581	4950V00200A	METAL,SHIELD EGI KZ-17LZ21
582	4950V00201A	METAL,SHIELD EGI BOTTOM KZ-17LZ21

REPLACEMENT PARTS LIST

For Capacitor & Resistors, the characters at 2nd and 3rd digit in the P/No. means as follows;

CC, CX, CK, CN, CH : Ceramic
CQ : Polyester
CE : Electrolytic
CF : Fixed Film

RD : Carbon Film
RS : Metal Oxide Film
RN : Metal Film
RH : CHIP, Metal Glazed(Chip)
RR : Drawing

DATE: 2004. 3. 9.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
CAPACITOR				
			C103	0CE227DF618 220UF STD 16V M FL TP5
			C109	0CE106DK618 10UF STD 50V M FL TP5
			C110	0CE476DF618 47UF STD 16V M FL TP5
			C112	0CE476DF618 47UF STD 16V M FL TP5
			C113	0CE107DF618 100UF STD 16V M FL TP5
			C1527	0CE107DF618 100UF STD 16V M FL TP5
			C1544	0CE107DF618 100UF STD 16V M FL TP5
			C1545	0CE107DF618 100UF STD 16V M FL TP5
			C1599	0CE107DF618 100UF STD 16V M FL TP5
			C19	0CE106DF618 10UF STD 16V M FL TP5
			C2110	0CE107DD618 100UF STD 10V M FL TP5
			C216	0CE106DF618 10UF STD 16V M FL TP5
			C219	0CE106DF618 10UF STD 16V M FL TP5
			C220	0CE106DF618 10UF STD 16V M FL TP5
			C316	0CE107DD618 100UF STD 10V M FL TP5
			C328	0CE106DF618 10UF STD 16V M FL TP5
			C332	0CE476DF618 47UF STD 16V M FL TP5
			C333	0CE107DF618 100UF STD 16V M FL TP5
			C338	0CE107DF618 100UF STD 16V M FL TP5
			C343	0CE476DF618 47UF STD 16V M FL TP5
			C546	0CE107DF618 100UF STD 16V M FL TP5
			C583	0CE107DF618 100UF STD 16V M FL TP5
			C584	0CE107DF618 100UF STD 16V M FL TP5
			C585	0CE107DF618 100UF STD 16V M FL TP5
			C6	0CE107DF618 100UF STD 16V M FL TP5
			C603	0CE476DF618 47UF STD 16V M FL TP5
			C613	0CE107DF618 100UF STD 16V M FL TP5
			C615	0CE107DD618 100UF STD 10V M FL TP5
			C616	0CE106DF618 10UF STD 16V M FL TP5
			C617	0CE106DF618 10UF STD 16V M FL TP5
			C630	0CE107DF618 100UF STD 16V M FL TP5
			C634	0CE107DF618 100UF STD 16V M FL TP5
			C643	0CE476DK618 47UF STD 50V M FL TP5
			C650	0CE227DH618 220UF STD 25V M FL TP5
			C711	0CE107DF618 100UF STD 16V M FL TP5
			C730	0CE107DH618 100UF STD 25V M FL TP5
			C813	0CE107DD618 100UF STD 10V M FL TP5
			C819	0CE106DF618 10UF STD 16V M FL TP5
			C830	0CE107DK618 100UF STD 50V M FL TP5
			C831	0CE227BJ618 220U KME 35V M FL TP5
			C847	0CE476BK618 47UF KME 50V M FL TP5
			C856	0CE226DN618 22UF STD 100V M FL TP5
			C875	0CE108DH618 1000UF STD 25V M FL TP5
			C888	0CE477DH618 470UF STD 25V M FL TP5
			C902A	0CE227DD618 220UF STD 10V M FL TP5
			C923	0CE476DF618 47UF STD 16V M FL TP5
			C924	0CE476DF618 47UF STD 16V M FL TP5
			C925	0CE476DF618 47UF STD 16V M FL TP5
			C926	0CE476DF618 47UF STD 16V M FL TP5
			C927	0CE476DF618 47UF STD 16V M FL TP5
			C928	0CE476DF618 47UF STD 16V M FL TP5
			C941	0CE106DK618 10UF STD 50V M FL TP5
			C942	0CE107DF618 100UF STD 16V M FL TP5
			C962	0CE107DF618 100UF STD 16V M FL TP5

DATE: 2004. 3. 9.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
			C983	0CE107DD618 100UF STD 10V M FL TP5
			C984	0CE107DD618 100UF STD 10V M FL TP5
			C111	0CH2472K516 4700P 50V K B 2.0X1.25 R/TP
			C286	0CH2473K516 47000P 50V K B 2.0X1.25 R/TP
			C287	0CH2473K516 47000P 50V K B 2.0X1.25 R/TP
			C288	0CH2473K516 47000P 50V K B 2.0X1.25 R/TP
			C319	0CH2473K516 47000P 50V K B 2.0X1.25 R/TP
			C326	0CH2473K516 47000P 50V K B 2.0X1.25 R/TP
			C331	0CH2473K516 47000P 50V K B 2.0X1.25 R/TP
			C354	0CH2473K516 47000P 50V K B 2.0X1.25 R/TP
			C811	0CH2472K516 4700P 50V K B 2.0X1.25 R/TP
			C965	0CH2473K516 47000P 50V K B 2.0X1.25 R/TP
			C969	0CH2473K516 47000P 50V K B 2.0X1.25 R/TP
			C975	0CH2473K516 47000P 50V K B 2.0X1.25 R/TP
			C451	0CH5050K116 5PF 50V D NP0 2012 R/TP
			C452	0CH5050K116 5PF 50V D NP0 2012 R/TP
			C453	0CH5050K116 5PF 50V D NP0 2012 R/TP
			C454	0CH5050K116 5PF 50V D NP0 2012 R/TP
			C455	0CH5050K116 5PF 50V D NP0 2012 R/TP
			C456	0CH5050K116 5PF 50V D NP0 2012 R/TP
			C457	0CH5050K116 5PF 50V D NP0 2012 R/TP
			C458	0CH5050K116 5PF 50V D NP0 2012 R/TP
			C459	0CH5050K116 5PF 50V D NP0 2012 R/TP
			C460	0CH5050K116 5PF 50V D NP0 2012 R/TP
			C461	0CH5050K116 5PF 50V D NP0 2012 R/TP
			C462	0CH5050K116 5PF 50V D NP0 2012 R/TP
			C463	0CH5050K116 5PF 50V D NP0 2012 R/TP
			C464	0CH5050K116 5PF 50V D NP0 2012 R/TP
			C465	0CH5050K116 5PF 50V D NP0 2012 R/TP
			C466	0CH5050K116 5PF 50V D NP0 2012 R/TP
			C467	0CH5050K116 5PF 50V D NP0 2012 R/TP
			C468	0CH5050K116 5PF 50V D NP0 2012 R/TP
			C469	0CH5050K116 5PF 50V D NP0 2012 R/TP
			C470	0CH5050K116 5PF 50V D NP0 2012 R/TP
			C471	0CH5050K116 5PF 50V D NP0 2012 R/TP
			C472	0CH5050K116 5PF 50V D NP0 2012 R/TP
			C473	0CH5050K116 5PF 50V D NP0 2012 R/TP
			C474	0CH5050K116 5PF 50V D NP0 2012 R/TP
			C800	181-010M PP 630V 0.018UF J
			C803	0CQZVBK002D A.C 275V 0.47UF K (S=22.5)
			C805	0CQZVBK002C A.C 275V 0.22UF K (S=22.5)
			C839	0CQZVBK002D A.C 275V 0.47UF K (S=22.5)
			C840	181-013R MPP 0.47UF 400V 5% FM
			C843	181-007T "MPE ECQ-V1H105JL3(TR), 50V 1"
			C845	181-120P 470 PF 4KV K JE R FL 10
			C846	181-120P 470 PF 4KV K JE R FL 10
			C868	181-007T "MPE ECQ-V1H105JL3(TR), 50V 1"
			C883	181-091D DEHR33A102KN2A 1000PF 1KV 10
			C890	181-120P 470 PF 4KV K JE R FL 10
			C891	181-120P 470 PF 4KV K JE R FL 10
			C894	181-091N "SL 100PF 1KV 10%, -10% R/TP 1"
			C1	0CH3104K566 0.1UF 50V 10% X7R 2012 R/TP
			C102	0CH3104K566 0.1UF 50V 10% X7R 2012 R/TP
			C104	0CH5151K416 150PF 50V 5% NP0 2012 R/TP

DATE: 2004. 3. 9.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C105	0CH5151K416	150PF 50V 5% NP0 2012 R/TP
		C106	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C108	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1141	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C120	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C121	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C122	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C123	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C124	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C125	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C126	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C127	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C13	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1502	0CH5330K416	33PF 50V 5% NP0 2012 R/TP
		C1503	0CH5330K416	33PF 50V 5% NP0 2012 R/TP
		C1504	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1505	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1506	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1507	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1508	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1509	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1510	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1511	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1512	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1513	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1514	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1515	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1516	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1517	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1518	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1519	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1520	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1521	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1522	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1523	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1524	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1525	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1526	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1528	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1529	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1530	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1531	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1532	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1534	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1535	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1536	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1538	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1539	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1540	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1541	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1542	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1543	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C16	0CH5101K416	100PF 50V 5% NP0 2012 R/TP
		C18	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C20	0CH5330K416	33PF 50V 5% NP0 2012 R/TP
		C201	0CH5120K416	12PF 50V 5% NP0 2012 R/TP
		C202	0CH5120K416	12PF 50V 5% NP0 2012 R/TP
		C203	0CH5221K416	220PF 50V 5% NP0 2012 R/TP
		C204	0CH5221K416	220PF 50V 5% NP0 2012 R/TP
		C21	0CH5330K416	33PF 50V 5% NP0 2012 R/TP
		C211	0CH5471K416	470PF 50V 5% NP0 2012 R/TP
		C212	0CH5471K416	470PF 50V 5% NP0 2012 R/TP

DATE: 2004. 3. 9.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C2300	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C2301	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C2302	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C2304	0CH5331K416	330PF 50V 5% NP0 2012 R/TP
		C2306	0CH5331K416	330PF 50V 5% NP0 2012 R/TP
		C2307	0CH5391K416	390PF 50V 5% NP0 2012 R/TP
		C2309	0CH5471K416	470PF 50V 5% NP0 2012 R/TP
		C2310	0CH5471K416	470PF 50V 5% NP0 2012 R/TP
		C237	0CH5391K416	390PF 50V 5% NP0 2012 R/TP
		C289	0CH5331K416	330PF 50V 5% NP0 2012 R/TP
		C290	0CH5331K416	330PF 50V 5% NP0 2012 R/TP
		C291	0CH5331K416	330PF 50V 5% NP0 2012 R/TP
		C292	0CH5331K416	330PF 50V 5% NP0 2012 R/TP
		C3	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C301	0CK224DF56A	220000PF 2012 16V 10% R/TP X
		C303	0CK224DF56A	220000PF 2012 16V 10% R/TP X
		C305	0CK224DF56A	220000PF 2012 16V 10% R/TP X
		C308	0CH5101K416	100PF 50V 5% NP0 2012 R/TP
		C310	0CH5101K416	100PF 50V 5% NP0 2012 R/TP
		C312	0CH5101K416	100PF 50V 5% NP0 2012 R/TP
		C313	0CH5391K416	390PF 50V 5% NP0 2012 R/TP
		C315	0CK224DF56A	220000PF 2012 16V 10% R/TP X
		C317	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C322	0CH5200K416	20PF 50V 5% NP0 2012 R/TP
		C327	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C329	0CH5030K116	3PF 50V 0.5 PF NP0 2012 R/TP
		C330	0CH5030K116	3PF 50V 0.5 PF NP0 2012 R/TP
		C334	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C336	0CK224DF56A	220000PF 2012 16V 10% R/TP X
		C339	0CH5391K416	390PF 50V 5% NP0 2012 R/TP
		C341	0CK224DF56A	220000PF 2012 16V 10% R/TP X
		C342	0CH5391K416	390PF 50V 5% NP0 2012 R/TP
		C344	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C346	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C348	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C350	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C352	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C411	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C412	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C413	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C414	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C415	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C421	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C423	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C427	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C434	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C435	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C436	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C437	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C438	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C439	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C475	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C476	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C477	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C478	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C479	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C480	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C481	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C482	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C483	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C484	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C485	0CH5100K416	10PF 50V 5% NP0 2012 R/TP

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C486	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C487	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C488	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C489	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C490	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C492	0CH5180K416	18PF 50V 5% NP0 2012 R/TP
		C493	0CH5180K416	18PF 50V 5% NP0 2012 R/TP
		C495	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C522	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C523	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C524	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C525	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C526	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C527	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C528	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C529	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C530	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C531	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C532	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C533	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C534	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C535	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C536	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C537	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C538	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C539	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C540	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C541	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C542	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C543	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C544	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C545	0CH5100K416	10PF 50V 5% NP0 2012 R/TP
		C555	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C560	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C561	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C566	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C57	0CH5101K416	100PF 50V 5% NP0 2012 R/TP
		C574	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C575	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C582	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C59	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C60	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C605	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C61	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C612	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C618	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C62	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C621	0CK224DF56A	220000PF 2012 16V 10% R/TP X
		C622	0CK224DF56A	220000PF 2012 16V 10% R/TP X
		C624	0CK224DF56A	220000PF 2012 16V 10% R/TP X
		C626	0CK224DF56A	220000PF 2012 16V 10% R/TP X
		C627	0CK224DF56A	220000PF 2012 16V 10% R/TP X
		C628	0CK224DF56A	220000PF 2012 16V 10% R/TP X
		C63	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C632	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C636	0CH5560K416	56PF 50V 5% NP0 2012 R/TP
		C637	0CH5560K416	56PF 50V 5% NP0 2012 R/TP
		C639	0CH5020K116	2PF 50V 0.5 PF NP0 2012 R/TP
		C640	0CH5020K116	2PF 50V 0.5 PF NP0 2012 R/TP
		C644	0CK224DF56A	220000PF 2012 16V 10% R/TP X
		C645	0CK224DF56A	220000PF 2012 16V 10% R/TP X
		C657	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C659	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C662	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C663	0CH5221K416	220PF 50V 5% NP0 2012 R/TP
		C664	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C665	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C666	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C667	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C668	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C677	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C679	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C680	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C7	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C701	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C702	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C703	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C704	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C705	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C731	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C8	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C801	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C804	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C807	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C808	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C809	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C812	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C814	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C818	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C819	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C820	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C824	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C871	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C872	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C873	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C894	0CH5101K416	100PF 50V 5% NP0 2012 R/TP
		C895	0CH5101K416	100PF 50V 5% NP0 2012 R/TP
		C901	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C903	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C906	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C909	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C912	0CH5821K416	820PF 50V 5% NP0 2012 R/TP
		C918	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C920	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C921	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C922	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C929	0CH5221K416	220PF 50V 5% NP0 2012 R/TP
		C951	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C952	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C953	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C954	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C955	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C956	0CK823DK56A	82000PF 2012 50V 10% R/TP X7
		C958	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C959	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C960	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C961	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C963	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C964	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C967	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C968	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C971	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C973	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C974	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C977	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C978	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C979	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C980	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C981	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C982	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C991	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C992	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1101	0CH2474F566	0.47UF 16V 10% X7R 2012 R/TP
		C17	0CH2103K516	10000PF 50V 10% B(Y5P) 2012
		C22	0CH2103K516	10000PF 50V 10% B(Y5P) 2012
		C23	0CH2103K516	10000PF 50V 10% B(Y5P) 2012
		C24	0CH2103K516	10000PF 50V 10% B(Y5P) 2012
		C314	0CH2152K516	1500PF 50V 10% B(Y5P) 2012 R
		C318	0CH2152K516	1500PF 50V 10% B(Y5P) 2012 R
		C321	0CH2683K946	"0.068UF 50V 80%,-20% F(Y5V)"
		C323	0CH2683K946	"0.068UF 50V 80%,-20% F(Y5V)"
		C324	0CH2683K946	"0.068UF 50V 80%,-20% F(Y5V)"
		C325	0CH2152K516	1500PF 50V 10% B(Y5P) 2012 R
		C335	0CH2102K516	1000PF 50V 10% B(Y5P) 2012 R
		C340	0CH2102K516	1000PF 50V 10% B(Y5P) 2012 R
		C345	0CH2102K516	1000PF 50V 10% B(Y5P) 2012 R
		C399	0CH2474F566	0.47UF 16V 10% X7R 2012 R/TP
		C401	0CH2103K516	10000PF 50V 10% B(Y5P) 2012
		C604	0CH2103K516	10000PF 50V 10% B(Y5P) 2012
		C606	0CH2562K516	5600PF 50V 10% B(Y5P) 2012 R
		C607	0CH2562K516	5600PF 50V 10% B(Y5P) 2012 R
		C629	0CH2103K516	10000PF 50V 10% B(Y5P) 2012
		C631	0CH2222K516	2200PF 50V 10% B(Y5P) 2012 R
		C635	0CH2103K516	10000PF 50V 10% B(Y5P) 2012
		C641	0CH2103K516	10000PF 50V 10% B(Y5P) 2012
		C656	0CH2103K516	10000PF 50V 10% B(Y5P) 2012
		C661	0CH2103K516	10000PF 50V 10% B(Y5P) 2012
		C669	0CH2474F566	0.47UF 16V 10% X7R 2012 R/TP
		C670	0CH2474F566	0.47UF 16V 10% X7R 2012 R/TP
		C672	0CH2474F566	0.47UF 16V 10% X7R 2012 R/TP
		C674	0CH2474F566	0.47UF 16V 10% X7R 2012 R/TP
		C675	0CH2474F566	0.47UF 16V 10% X7R 2012 R/TP
		C676	0CH2474F566	0.47UF 16V 10% X7R 2012 R/TP
		C678	0CH2103K516	10000PF 50V 10% B(Y5P) 2012
		C681	0CH2103K516	10000PF 50V 10% B(Y5P) 2012
		C809	0CH2222K516	2200PF 50V 10% B(Y5P) 2012 R
		C863	0CH2102K516	1000PF 50V 10% B(Y5P) 2012 R
		C880	0CH2222K516	2200PF 50V 10% B(Y5P) 2012 R
		C881	0CH2102K516	1000PF 50V 10% B(Y5P) 2012 R
		C882	0CH2222K516	2200PF 50V 10% B(Y5P) 2012 R
		C892	0CH2103K516	10000PF 50V 10% B(Y5P) 2012
		C893	0CH2103K516	10000PF 50V 10% B(Y5P) 2012
		C896	0CH2103K516	10000PF 50V 10% B(Y5P) 2012
		C897	0CH2103K516	10000PF 50V 10% B(Y5P) 2012
		C9	0CH2334F566	0.33UF 16V 10% X7R 2012 R/TP
		C905	0CH2103K516	10000PF 50V 10% B(Y5P) 2012
		C908	0CH2103K516	10000PF 50V 10% B(Y5P) 2012
		C911	0CH2103K516	10000PF 50V 10% B(Y5P) 2012
		C913	0CH2103K516	10000PF 50V 10% B(Y5P) 2012
		C915	0CH2103K516	10000PF 50V 10% B(Y5P) 2012
		C917	0CH2103K516	10000PF 50V 10% B(Y5P) 2012
		C957	0CH2822K516	8200PF 50V 10% B(Y5P) 2012 R
		C972	0CH2102K516	1000PF 50V 10% B(Y5P) 2012 R
		C990	0CH2102K516	1000PF 50V 10% B(Y5P) 2012 R
		C107	0CE108DD618	1000UF STD 10V M FL TP5
		C2	0CE687DD618	680UF STD 10V 20% FL TP 5

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		C2305	0CE225DK618	2.2UF STD 50V 20% FL TP 5
		C337	0CE226DF618	22UF STD 16V M FL TP5
		C347	0CE105CK636	"1UF SHL,SD 50V 20% FM5 BP(D)"
		C349	0CE105CK636	"1UF SHL,SD 50V 20% FM5 BP(D)"
		C351	0CE105CK636	"1UF SHL,SD 50V 20% FM5 BP(D)"
		C353	0CE105CK636	"1UF SHL,SD 50V 20% FM5 BP(D)"
		C619	0CE335DK618	3.3UF STD 50V 20% FL TP 5
		C620	0CE477DF618	470UF STD 16V 20% FL TP 5
		C777	0CE477DF618	470UF STD 16V 20% FL TP 5
		C802	0CE477DF618	470UF STD 16V 20% FL TP 5
		C803	0CE227DJ618	220UF STD 35V M FL TP5
		C804	0CE477DF618	470UF STD 16V 20% FL TP 5
		C805	0CE477DF618	470UF STD 16V 20% FL TP 5
		C806	0CE477DF618	470UF STD 16V 20% FL TP 5
		C807	0CE1072V610	100UF KMF 450V 20% FL BULK
		C813	0CE475DK618	4.7UF STD 50V 20% FL TP 5
		C815	0CE227DJ618	220UF STD 35V M FL TP5
		C831	0CE477DD618	470UF STD 10V 20% FL TP 5
		C832	0CE477DD618	470UF STD 10V 20% FL TP 5
		C834	0CE477DD618	470UF STD 10V 20% FL TP 5
		C835	0CE477DD618	470UF STD 10V 20% FL TP 5
		C836	0CE477DD618	470UF STD 10V 20% FL TP 5
		C837	0CE477DD618	470UF STD 10V 20% FL TP 5
		C839	0CE477DF618	470UF STD 16V 20% FL TP 5
		C857	0CE477BJ618	470UF KME TYPE 35V 20% FL TP
		C858	0CE477BJ618	470UF KME TYPE 35V 20% FL TP
		C859	0CE477BJ618	470UF KME TYPE 35V 20% FL TP
		C860	0CE477BJ618	470UF KME TYPE 35V 20% FL TP
		C902	0CE477DD618	470UF STD 10V 20% FL TP 5
		C658	0CN475FH67A	4.7UF 3225 25V 20% R/TP X5R
		C660	0CN475FH67A	4.7UF 3225 25V 20% R/TP X5R
		C682	0CN475FH67A	4.7UF 3225 25V 20% R/TP X5R
		C683	0CN475FH67A	4.7UF 3225 25V 20% R/TP X5R
		C684	0CN475FH67A	4.7UF 3225 25V 20% R/TP X5R
		C2102	0CN1030F679	10000P 16V M Y TA52
DIODEs				
		D801	0DRSA00150A	RBV-406 SANKEN BK USC 600V 4
		D803	0DR260001AA	FMG-26S ST SANKEN TO220 600V
		D810	0DR340009AA	MBRS340 TP FAIRCHILD NON 40V
		D811	0DD100009AM	EU1ZV(1) TP SANKEN
		D811	0DR340009AA	MBRS340 TP FAIRCHILD NON 40V
		D812	0DD100009AM	EU1ZV(1) TP SANKEN
		D813	0DD100009AM	EU1ZV(1) TP SANKEN
		D814	0DD100009AM	EU1ZV(1) TP SANKEN
		D816	0DD100009AM	EU1ZV(1) TP SANKEN
		D835	0DD100009AM	EU1ZV(1) TP SANKEN
		D836	0DR060009AA	TVR06J TP GULF SEMICONDUCTOR
		D837	0DR060009AA	TVR06J TP GULF SEMICONDUCTOR
		D1	0DD181009AB	KDS181 TP KEC - 85V - - - 30
		D804	0DD181009AB	KDS181 TP KEC - 85V - - - 30
		ZD2101	0DZ510009BE	GDZ5.1B TP GRANDE DO34 500MW
		ZD801	0DZ180009AG	MTZJ18B TP ROHM-K DO34 500M
		ZD803	0DZ180009AG	MTZJ18B TP ROHM-K DO34 500M
		ZD805	0DZ180009AG	MTZJ18B TP ROHM-K DO34 500M
		ZD806	0DZ110009AD	MTZJ11B TP ROHM-K DO34 500MW
		ZD808	0DZ110009AD	MTZJ11B TP ROHM-K DO34 500MW
		ZD812	0DZ110009AD	MTZJ11B TP ROHM-K DO34 500MW
		ZD818	0DZ110009AD	MTZJ11B TP ROHM-K DO34 500MW
		C51	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		C52	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C53	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		C54	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		C55	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		C56	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		ZD215	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		ZD216	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		ZD221	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		ZD222	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		ZD650	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		ZD651	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		ZD652	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		ZD807	0DZ560009CF	MTZJ5.6B TP ROHM-K DO34 0.5W
		ZD809	0DZ560009CF	MTZJ5.6B TP ROHM-K DO34 0.5W
		ZD815	0DZ910009AJ	MTZJ9.1B TP ROHM-K DO34 0.5W
		ZD816	0DZ910009AJ	MTZJ9.1B TP ROHM-K DO34 0.5W
		ZD817	0DZ910009AJ	MTZJ9.1B TP ROHM-K DO34 0.5W
IC				
		IC401	0IZZTSZ375A	COPY TE28F800B3TA90 48TSP B
		IC2	0IFA752700A	KA75270Z 3 TP RE-SET IC MC-0
		IC301	0IIT323000E	VPC3230D C5 80P QFP TRAY VID
		IC604	0IKE704200J	KIA7042AF SOT-89 TP 4.2V VOL
		IC804	0IL1817000G	"LTV817M-VB 4P,DIP BK PHOTO C"
		IC805	0IL1817000G	"LTV817M-VB 4P,DIP BK PHOTO C"
		IC1	0ISM555000B	SDA555XFL 52DIP ST FLASH MEM
		IC201	0IAL242110A	"AT24C21-10SI-2.5 8P,SOP TP 1"
		IC3	0IAL241610B	AT24C16A-10PI-2.7 8PIN DIP S
		IC503	0IMCRAL006A	AT24C16AN-10SI-2.7 ATMEL 8P
		IC915	0IMMRHY033A	HY57V643220C(L)T-6 HYNIX 86P
		IC501	0IMCRPW001B	PW181(133MHZ) PIXELWORKS 352
		IC502	0IMCRTI020A	TLC7733ID TEXAS INSTRUMENT 8
		IC510	0IMCRGN001B	FLI2310BC GENESIS 208P PQFP
		IC555	0IMCRPU001A	P2781A PULSE CORE SO 8 PIN R
		IC600	0IMCRTI022D	TPA3004D2 TEXAS INSTRUMENT 4
		IC601	0IMCRMN001C	MSP3411G QA B8 V3 MICRONAS 8
		IC701	0IMCRTH001A	THC63LVDM83R THINE ELECTRONI
		IC702	0IMCRNS007B	LM2941S NATIONAL SEMICONDUCT
		IC801	0IMCRFE001A	FA5501AN-TE1 FUJI ELECTRIC 8
		IC803	0IMCRFE002A	F9222L-F219-S13RR FUJI ELECT
		IC806	0IMCRNS007D	LMS1587 CS 1.5V NATIONAL SEM
		IC807	0IMCRNS007C	LMS1587CS-ADJ NATIONAL SEMIC
		IC808	0IMCRNS007C	LMS1587CS-ADJ NATIONAL SEMIC
		IC888	0IMCRNS007A	LM2940S 8V NATIONAL SEMICOND
		IC901	0IMCRMIO06A	"M52758FP MITSUBISHI 36PIN, R"
		IC950	0IMCRAD002A	AD9883AKST-110 ANALOG DEVICE
		IC951	0IMCRNS007E	LMS1587CS-3.3 NATIONAL SEMIC
		IC954	0IMCRMZ001A	MP1583DN MONOLITHIC POWER SY
		IC955	0IMCRMZ001A	MP1583DN MONOLITHIC POWER SY
		IC603	0IMCRFA008A	"KA78M05RTM, FAIRCHILD 2P D-P"
		Q830	0IMCRFA007A	"KA431Z FAIRCHILD 3DIP,TO-92"
		IC202	0IMCRFA022A	74F14SC FAIRCHILD 14P SOIC R
		IC504	0IMCRTI002A	SN74HCT32D TEXAS INSTRUMENT
		Q1	0IFA270000A	"2N7000TA TO-92, 3P TP LEVEL"
		Q2	0IFA270000A	"2N7000TA TO-92, 3P TP LEVEL"
COIL & CORE & INDUCTOR				
		L652	6140VR0008A	SLF12575T-330M4R7 33UH SMD
		L653	6140VR0008A	SLF12575T-330M4R7 33UH SMD
		L654	6140VR0008A	SLF12575T-330M4R7 33UH SMD
		L655	6140VR0008A	SLF12575T-330M4R7 33UH SMD

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		L801	6140VR0008B	SLF12575T-150M3R2 15UH SMD
		L805	6140VR0008B	SLF12575T-150M3R2 15UH SMD
		FB801	125-022K	FERRITE 1UH NY 3.5*6.0MM AX
		L1	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L102	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L103	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L1955	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L1956	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L1957	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L1958	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L205	6210TCE001A	HB-1S2012-080JT CERATEC 2012
		L206	6210TCE001A	HB-1S2012-080JT CERATEC 2012
		L2100	6210TCE001A	HB-1S2012-080JT CERATEC 2012
		L2101	6210TCE001A	HB-1S2012-080JT CERATEC 2012
		L2107	6210TCE001A	HB-1S2012-080JT CERATEC 2012
		L2108	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L2109	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L214	6210TCE001A	HB-1S2012-080JT CERATEC 2012
		L215	6210TCE001A	HB-1S2012-080JT CERATEC 2012
		L222	6210TCE001A	HB-1S2012-080JT CERATEC 2012
		L223	6210TCE001A	HB-1S2012-080JT CERATEC 2012
		L301	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L302	6210TCE001A	HB-1S2012-080JT CERATEC 2012
		L303	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L451	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L452	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L453	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L454	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L601	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L603	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L651	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L699	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L702	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L703	6210TCE001A	HB-1S2012-080JT CERATEC 2012
		L732	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L808	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L901	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L951	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L952	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L953	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L954	6210TCE001A	HB-1S2012-080JT CERATEC 2012
		L101	0LA0102K139	10UH 10% A 4.0 X 10.5 TA52 -
		L2101	0LA0222K119	22UH K 2.3*3.4 TP
		L2105	0LA0472K119	47UH K 2.3*3.4 TP
		L2106	0LA0472K119	47UH K 2.3*3.4 TP
		L2102	0LC0233002A	3.3UH CERATECH R/TP
		L2103	0LC0233002A	3.3UH CERATECH R/TP
		L2104	0LC0233002A	3.3UH CERATECH R/TP
		L216	0LC0233002A	3.3UH CERATECH R/TP
		L217	0LC0233002A	3.3UH CERATECH R/TP
		L218	0LC0233002A	3.3UH CERATECH R/TP
		L219	0LC0233002A	3.3UH CERATECH R/TP
		L220	0LC0233002A	3.3UH CERATECH R/TP
FET & TRANSISTOR				
		IC805	0TF492509AA	SI4925DY TP TEMIC 30V 6.1A
		Q2101	0TR319809AA	KTC3198-Y(KTC1815) TP KEC TO
		Q2102	0TR319809AA	KTC3198-Y(KTC1815) TP KEC TO
		Q101	0TR387500AA	CHIP 2SC3875S(ALY) BK KEC -
		Q102	0TR387500AA	CHIP 2SC3875S(ALY) BK KEC -
		Q103	0TR387500AA	CHIP 2SC3875S(ALY) BK KEC -

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		Q104	0TR387500AA	CHIP 2SC3875S(ALY) BK KEC -
		Q106	0TR150400BA	CHIP 2SA1504S(ASY) BK KEC -
		Q107	0TR387500AA	CHIP 2SC3875S(ALY) BK KEC -
		Q202	0TR387500AA	CHIP 2SC3875S(ALY) BK KEC -
		Q203	0TR387500AA	CHIP 2SC3875S(ALY) BK KEC -
		Q3	0TR387500AA	CHIP 2SC3875S(ALY) BK KEC -
		Q370	0TR387500AA	CHIP 2SC3875S(ALY) BK KEC -
		Q371	0TR387500AA	CHIP 2SC3875S(ALY) BK KEC -
		Q4	0TR387500AA	CHIP 2SC3875S(ALY) BK KEC -
		Q605	0TR387500AA	CHIP 2SC3875S(ALY) BK KEC -
		Q606	0TR150400BA	CHIP 2SA1504S(ASY) BK KEC -
		Q701	0TR387500AA	CHIP 2SC3875S(ALY) BK KEC -
		Q801	0TR387500AA	CHIP 2SC3875S(ALY) BK KEC -
		Q802	0TR387500AA	CHIP 2SC3875S(ALY) BK KEC -
		Q805	0TR387500AA	CHIP 2SC3875S(ALY) BK KEC -
		Q806	0TR387500AA	CHIP 2SC3875S(ALY) BK KEC -
		Q810	0TR387500AA	CHIP 2SC3875S(ALY) BK KEC -
		Q811	0TR387500AA	CHIP 2SC3875S(ALY) BK KEC -
		Q812	0TR387500AA	CHIP 2SC3875S(ALY) BK KEC -
		IC804	0TFVI80005A	VISHAY SI4963DY R/TP SO-8 -2
		Q815	0TFFJ80001A	2SK2018-01S-TB16R FUJI R/TP
		Q816	0TFFJ80001A	2SK2018-01S-TB16R FUJI R/TP
		Q817	0TFFJ80001B	2SK2071-01S-TB16R FUJI R/TP
RESISTORS				
		C30	0RH0000D622	0 1/10W P-TYPE TAPPING
		R1	0RH1000D622	100 1/10W 5 D.R/TP
		R10	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R1001	0RH0000D622	0 1/10W P-TYPE TAPPING
		R1002	0RH0000D622	0 1/10W P-TYPE TAPPING
		R102	0RH4702D622	47K 1/10W 5 D.R/TP
		R104	0RH1000D622	100 1/10W 5 D.R/TP
		R105	0RH1000D622	100 1/10W 5 D.R/TP
		R109	0RH1000D622	100 1/10W 5 D.R/TP
		R110	0RH1000D622	100 1/10W 5 D.R/TP
		R1101	0RH1000D622	100 1/10W 5 D.R/TP
		R1102	0RH1000D622	100 1/10W 5 D.R/TP
		R1104	0RH1000D622	100 1/10W 5 D.R/TP
		R111	0RH4702D622	47K 1/10W 5 D.R/TP
		R1119	0RH0000D622	0 1/10W P-TYPE TAPPING
		R112	0RH1000D622	100 1/10W 5 D.R/TP
		R1121	0RH0000D622	0 1/10W P-TYPE TAPPING
		R1124	0RH1000D622	100 1/10W 5 D.R/TP
		R1125	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R1129	0RH4703D622	470K 1/10W 5 D.R/TP
		R113	0RH0102D622	10 1/10W 5 D.R/TP
		R1133	0RH1000D622	100 1/10W 5 D.R/TP
		R1134	0RH1000D622	100 1/10W 5 D.R/TP
		R1135	0RH1000D622	100 1/10W 5 D.R/TP
		R1136	0RH1000D622	100 1/10W 5 D.R/TP
		R1137	0RH0000D622	0 1/10W P-TYPE TAPPING
		R1138	0RH0000D622	0 1/10W P-TYPE TAPPING
		R1139	0RH0000D622	0 1/10W P-TYPE TAPPING
		R1140	0RH0000D622	0 1/10W P-TYPE TAPPING
		R1141	0RH0000D622	0 1/10W P-TYPE TAPPING
		R1145	0RH0000D622	0 1/10W P-TYPE TAPPING
		R1146	0RH0000D622	0 1/10W P-TYPE TAPPING
		R1149	0RH0000D622	0 1/10W P-TYPE TAPPING
		R115	0RH6202D622	62K 1/10W 5 TA
		R119	0RH0000D622	0 1/10W P-TYPE TAPPING
		R120	0RH0000D622	0 1/10W P-TYPE TAPPING

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R122	0RH0000D622	0 1/10W P-TYPE TAPPING
		R123	0RH3002D622	30K 1/10W 5 D.R/TP
		R125	0RH1000D622	100 1/10W 5 D.R/TP
		R127	0RH1000D622	100 1/10W 5 D.R/TP
		R129	0RH4700D622	470 1/10W 5 D.R/TP
		R13	0RH0000D622	0 1/10W P-TYPE TAPPING
		R130	0RH4700D622	470 1/10W 5 D.R/TP
		R14	0RH0000D622	0 1/10W P-TYPE TAPPING
		R15	0RH1000D622	100 1/10W 5 D.R/TP
		R16	0RH1000D622	100 1/10W 5 D.R/TP
		R17	0RH1000D622	100 1/10W 5 D.R/TP
		R18	0RH1000D622	100 1/10W 5 D.R/TP
		R19	0RH3301D622	3.3K 1/10W 5 D.R/TP
		R2	0RH1000D622	100 1/10W 5 D.R/TP
		R20	0RH3301D622	3.3K 1/10W 5 D.R/TP
		R2004	0RH0472D622	47 1/10W 5 D.R/TP
		R2005	0RH0752D622	75 1/10W 5 D.R/TP
		R2006	0RH0752D622	75 1/10W 5 D.R/TP
		R2007	0RH0752D622	75 1/10W 5 D.R/TP
		R2008	0RH0752D622	75 1/10W 5 D.R/TP
		R2009	0RH0752D622	75 1/10W 5 D.R/TP
		R201	0RH0752D622	75 1/10W 5 D.R/TP
		R2010	0RH5101D622	5.1K 1/10W 5 D.R/TP
		R2011	0RH4703D622	470K 1/10W 5 D.R/TP
		R2012	0RH5101D622	5.1K 1/10W 5 D.R/TP
		R2013	0RH4703D622	470K 1/10W 5 D.R/TP
		R2014	0RH0000D622	0 1/10W P-TYPE TAPPING
		R202	0RH0752D622	75 1/10W 5 D.R/TP
		R203	0RH0752D622	75 1/10W 5 D.R/TP
		R209	0RH1000D622	100 1/10W 5 D.R/TP
		R21	0RH3301D622	3.3K 1/10W 5 D.R/TP
		R210	0RH1000D622	100 1/10W 5 D.R/TP
		R216	0RH1000D622	100 1/10W 5 D.R/TP
		R217	0RH1000D622	100 1/10W 5 D.R/TP
		R218	0RH1000D622	100 1/10W 5 D.R/TP
		R22	0RH3301D622	3.3K 1/10W 5 D.R/TP
		R223	0RH0752D622	75 1/10W 5 D.R/TP
		R224	0RH5101D622	5.1K 1/10W 5 D.R/TP
		R225	0RH5101D622	5.1K 1/10W 5 D.R/TP
		R226	0RH4703D622	470K 1/10W 5 D.R/TP
		R227	0RH4703D622	470K 1/10W 5 D.R/TP
		R228	0RH0752D622	75 1/10W 5 D.R/TP
		R23	0RH1004D622	1.0M 1/10W 5 D.R/TP
		R24	0RH1000D622	100 1/10W 5 D.R/TP
		R248	0RH1000D622	100 1/10W 5 D.R/TP
		R249	0RH1000D622	100 1/10W 5 D.R/TP
		R25	0RH3301D622	3.3K 1/10W 5 D.R/TP
		R252	0RH5101D622	5.1K 1/10W 5 D.R/TP
		R253	0RH5101D622	5.1K 1/10W 5 D.R/TP
		R254	0RH1000D622	100 1/10W 5 D.R/TP
		R255	0RH1000D622	100 1/10W 5 D.R/TP
		R256	0RH0752D622	75 1/10W 5 D.R/TP
		R257	0RH0752D622	75 1/10W 5 D.R/TP
		R26	0RH1000D622	100 1/10W 5 D.R/TP
		R267	0RH0000D622	0 1/10W P-TYPE TAPPING
		R270	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R271	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R274	0RH0752D622	75 1/10W 5 D.R/TP
		R275	0RH4702D622	47K 1/10W 5 D.R/TP
		R283	0RH0000D622	0 1/10W P-TYPE TAPPING
		R284	0RH0000D622	0 1/10W P-TYPE TAPPING
		R285	0RH0000D622	0 1/10W P-TYPE TAPPING

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R289	0RH0752D622	75 1/10W 5 D.R/TP
		R29	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R290	0RH0752D622	75 1/10W 5 D.R/TP
		R291	0RH0752D622	75 1/10W 5 D.R/TP
		R292	0RH0752D622	75 1/10W 5 D.R/TP
		R293	0RH0752D622	75 1/10W 5 D.R/TP
		R297	0RH0000D622	0 1/10W P-TYPE TAPPING
		R3	0RH3301D622	3.3K 1/10W 5 D.R/TP
		R30	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R301	0RH1000D622	100 1/10W 5 D.R/TP
		R302	0RH1000D622	100 1/10W 5 D.R/TP
		R303	0RH1000D622	100 1/10W 5 D.R/TP
		R304	0RH0000D622	0 1/10W P-TYPE TAPPING
		R305	0RH0000D622	0 1/10W P-TYPE TAPPING
		R306	0RH0000D622	0 1/10W P-TYPE TAPPING
		R309	0RH1000D622	100 1/10W 5 D.R/TP
		R31	0RH0000D622	0 1/10W P-TYPE TAPPING
		R311	0RH0000D622	0 1/10W P-TYPE TAPPING
		R312	0RH1000D622	100 1/10W 5 D.R/TP
		R313	0RH1000D622	100 1/10W 5 D.R/TP
		R314	0RH5600D622	560 1/10W 5 D.R/TP
		R32	0RH0000D622	0 1/10W P-TYPE TAPPING
		R321	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R322	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R324	0RH2702D622	27K 1/10W 5 D.R/TP
		R33	0RH1000D622	100 1/10W 5 D.R/TP
		R335	0RH0000D622	0 1/10W P-TYPE TAPPING
		R34	0RH1000D622	100 1/10W 5 D.R/TP
		R341	0RH0000D622	0 1/10W P-TYPE TAPPING
		R343	0RH0000D622	0 1/10W P-TYPE TAPPING
		R344	0RH0000D622	0 1/10W P-TYPE TAPPING
		R35	0RH1000D622	100 1/10W 5 D.R/TP
		R36	0RH1000D622	100 1/10W 5 D.R/TP
		R37	0RH4302D622	43K 1/10W 5 D.R/TP
		R373	0RH1000D622	100 1/10W 5 D.R/TP
		R38	0RH1000D622	100 1/10W 5 D.R/TP
		R39	0RH1000D622	100 1/10W 5 D.R/TP
		R399	0RH0000D622	0 1/10W P-TYPE TAPPING
		R4	0RH3301D622	3.3K 1/10W 5 D.R/TP
		R40	0RH1000D622	100 1/10W 5 D.R/TP
		R401	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R402	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R403	0RH3301D622	3.3K 1/10W 5 D.R/TP
		R404	0RH3301D622	3.3K 1/10W 5 D.R/TP
		R405	0RH3301D622	3.3K 1/10W 5 D.R/TP
		R41	0RH3301D622	3.3K 1/10W 5 D.R/TP
		R42	0RH1000D622	100 1/10W 5 D.R/TP
		R43	0RH4700D622	470 1/10W 5 D.R/TP
		R44	0RH2202D622	22K 1/10W 5 D.R/TP
		R45	0RH1000D622	100 1/10W 5 D.R/TP
		R457	0RH1000D622	100 1/10W 5 D.R/TP
		R458	0RH1000D622	100 1/10W 5 D.R/TP
		R47	0RH1000D622	100 1/10W 5 D.R/TP
		R471	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R472	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R473	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R476	0RH1000D622	100 1/10W 5 D.R/TP
		R477	0RH1000D622	100 1/10W 5 D.R/TP
		R480	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R481	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R482	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R486	0RH4701D622	4.7K 1/10W 5 D.R/TP

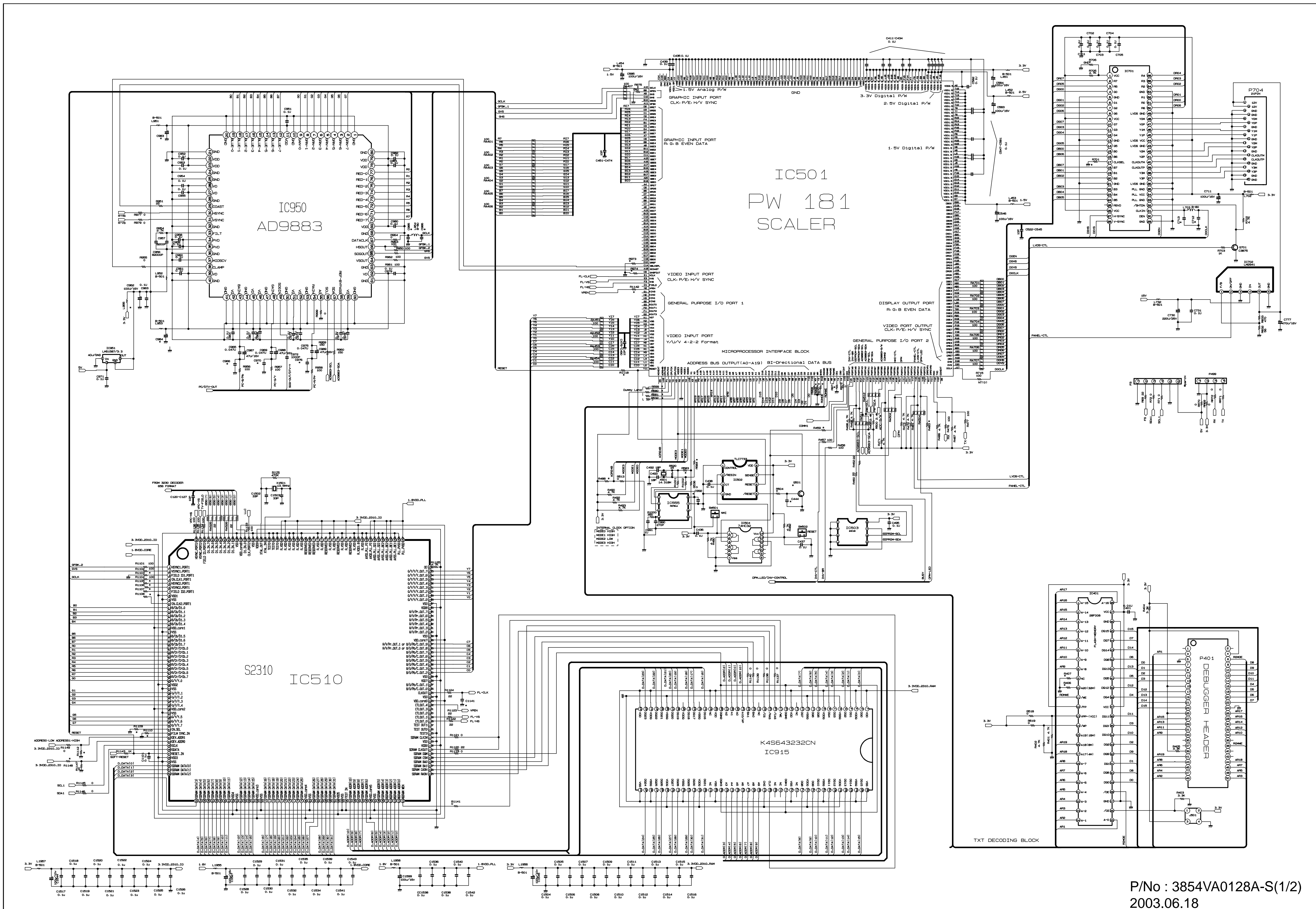
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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R487	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R49	0RH1000D622	100 1/10W 5 D.R/TP
		R490	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R492	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R493	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R495	0RH2401D622	2.4K 1/10W 5 TA
		R496	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R498	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R5	0RH1000D622	100 1/10W 5 D.R/TP
		R500	0RH2401D622	2.4K 1/10W 5 TA
		R51	0RH1500D622	150 1/10W 5 D.R/TP
		R513	0RH0000D622	0 1/10W P-TYPE TAPPING
		R518	0RH0000D622	0 1/10W P-TYPE TAPPING
		R519	0RH0000D622	0 1/10W P-TYPE TAPPING
		R520	0RH1004D622	1.0M 1/10W 5 D.R/TP
		R53	0RH1000D622	100 1/10W 5 D.R/TP
		R536	0RH0000D622	0 1/10W P-TYPE TAPPING
		R54	0RH1000D622	100 1/10W 5 D.R/TP
		R55	0RH1000D622	100 1/10W 5 D.R/TP
		R56	0RH1000D622	100 1/10W 5 D.R/TP
		R57	0RH1000D622	100 1/10W 5 D.R/TP
		R58	0RH1000D622	100 1/10W 5 D.R/TP
		R59	0RH1000D622	100 1/10W 5 D.R/TP
		R6	0RH1000D622	100 1/10W 5 D.R/TP
		R60	0RH1000D622	100 1/10W 5 D.R/TP
		R601	0RH1000D622	100 1/10W 5 D.R/TP
		R602	0RH1000D622	100 1/10W 5 D.R/TP
		R61	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R617	0RH1000D622	100 1/10W 5 D.R/TP
		R618	0RH1000D622	100 1/10W 5 D.R/TP
		R619	0RH1004D622	1.0M 1/10W 5 D.R/TP
		R62	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R622	0RH0102D622	10 1/10W 5 D.R/TP
		R623	0RH2702D622	27K 1/10W 5 D.R/TP
		R625	0RH4700D622	470 1/10W 5 D.R/TP
		R626	0RH1000D622	100 1/10W 5 D.R/TP
		R627	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R628	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R63	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R631	0RH1000D622	100 1/10W 5 D.R/TP
		R632	0RH3301D622	3.3K 1/10W 5 D.R/TP
		R634	0RH3301D622	3.3K 1/10W 5 D.R/TP
		R651	0RH1000D622	100 1/10W 5 D.R/TP
		R653	0RH1202D622	12K 1/10W 5 D.R/TP
		R656	0RH2202D622	22K 1/10W 5 D.R/TP
		R657	0RH0000D622	0 1/10W P-TYPE TAPPING
		R658	0RH0000D622	0 1/10W P-TYPE TAPPING
		R659	0RH1203D622	120K OHM 1 / 10 W 5% D R/TP
		R66	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R665	0RH0000D622	0 1/10W P-TYPE TAPPING
		R67	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R68	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R7	0RH3301D622	3.3K 1/10W 5 D.R/TP
		R702	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R705	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R71	0RH0000D622	0 1/10W P-TYPE TAPPING
		R715	0RH1000D622	100 1/10W 5 D.R/TP
		R72	0RH0000D622	0 1/10W P-TYPE TAPPING
		R73	0RH3301D622	3.3K 1/10W 5 D.R/TP
		R74	0RH0000D622	0 1/10W P-TYPE TAPPING
		R75	0RH1000D622	100 1/10W 5 D.R/TP
		R76	0RH3301D622	3.3K 1/10W 5 D.R/TP

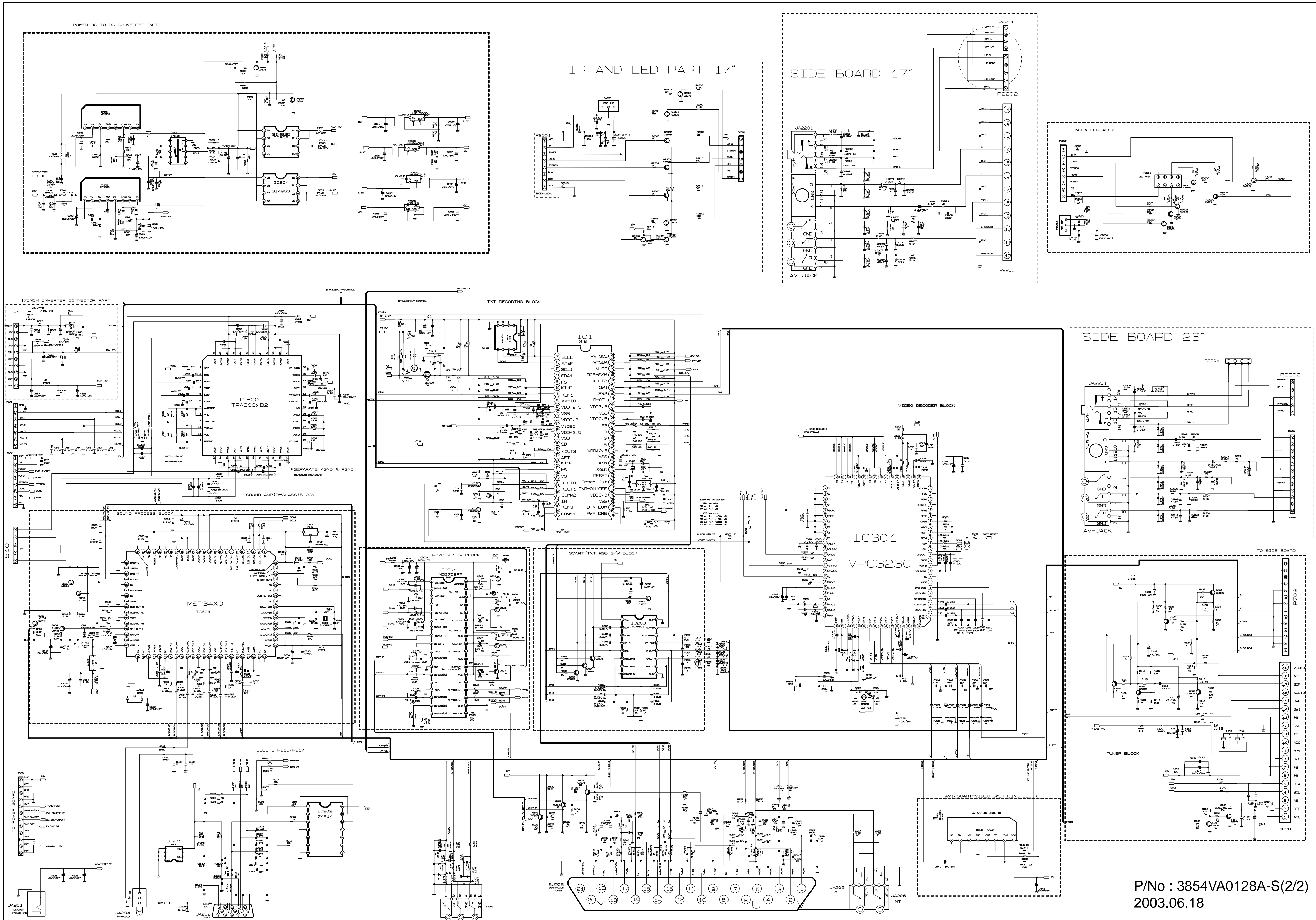
DATE: 2004. 3. 9.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R77	ORH3301D622	3.3K 1/10W 5 D.R/TP
		R79	ORH1000D622	100 1/10W 5 D.R/TP
		R8	ORH3301D622	3.3K 1/10W 5 D.R/TP
		R80	ORH0000D622	0 1/10W P-TYPE TAPPING
		R802	ORH3301D622	3.3K 1/10W 5 D.R/TP
		R804	ORH4701D622	4.7K 1/10W 5 D.R/TP
		R805	ORH8203D622	820K 1/10W 5 D.R/TP
		R809	ORH8203D622	820K 1/10W 5 D.R/TP
		R81	ORH3301D622	3.3K 1/10W 5 D.R/TP
		R811	ORH8203D622	820K 1/10W 5 D.R/TP
		R814	ORH1000D622	100 1/10W 5 D.R/TP
		R815	ORH8203D622	820K 1/10W 5 D.R/TP
		R816	ORH8203D622	820K 1/10W 5 D.R/TP
		R817	ORH8203D622	820K 1/10W 5 D.R/TP
		R819	ORH4703D622	470K 1/10W 5 D.R/TP
		R82	ORH4701D622	4.7K 1/10W 5 D.R/TP
		R820	ORH4703D622	470K 1/10W 5 D.R/TP
		R821	ORH1201D622	1.2K 1/10W 5 D.R/TP
		R821	ORH3303D622	330K 1/10W 5 D.R/TP
		R822	ORH4702D622	47K 1/10W 5 D.R/TP
		R823	ORH4702D622	47K 1/10W 5 D.R/TP
		R823	ORH1000D622	100 1/10W 5 D.R/TP
		R824	ORH1602D622	16K 1/10W 5 TA
		R825	ORH4702D622	47K 1/10W 5 D.R/TP
		R828	ORH1003D622	100K 1/10W 5 D.R/TP
		R83	ORH0000D622	0 1/10W P-TYPE TAPPING
		R830	ORH1000D622	100 1/10W 5 D.R/TP
		R831	ORH4702D622	47K 1/10W 5 D.R/TP
		R831	ORH1000D622	100 1/10W 5 D.R/TP
		R832	ORH0562D622	56 1/10W 5 D.R/TP
		R833	ORH4702D622	47K 1/10W 5 D.R/TP
		R833	ORH4700D622	470 1/10W 5 D.R/TP
		R834	ORH1200D622	120 1/10W 5 D.R/TP
		R835	ORH0682D622	68 1/10W 5 D.R/TP
		R838	ORH4702D622	47K 1/10W 5 D.R/TP
		R840	ORH1003D622	100K 1/10W 5 D.R/TP
		R840	ORH1202D622	12K 1/10W 5 D.R/TP
		R841	ORH4702D622	47K 1/10W 5 D.R/TP
		R841	ORH4702D622	47K 1/10W 5 D.R/TP
		R842	ORH6801D622	6.8K 1/10W 5 D.R/TP
		R843	ORH1502D622	15K 1/10W 5 D.R/TP
		R845	ORH4702D622	47K 1/10W 5 D.R/TP
		R848	ORH1003D622	100K 1/10W 5 D.R/TP
		R849	ORH1003D622	100K 1/10W 5 D.R/TP
		R85	ORH0000D622	0 1/10W P-TYPE TAPPING
		R850	ORH4701D622	4.7K 1/10W 5 D.R/TP
		R851	ORH4701D622	4.7K 1/10W 5 D.R/TP
		R853	ORH1003D622	100K 1/10W 5 D.R/TP
		R877	ORH0000D622	0 1/10W P-TYPE TAPPING
		R877	ORH2202D622	22K 1/10W 5 D.R/TP
		R878	ORH0000D622	0 1/10W P-TYPE TAPPING
		R879	ORH0000D622	0 1/10W P-TYPE TAPPING
		R898	ORH0000D622	0 1/10W P-TYPE TAPPING
		R9	ORH4701D622	4.7K 1/10W 5 D.R/TP
		R901	ORH0000D622	0 1/10W P-TYPE TAPPING
		R902	ORH0000D622	0 1/10W P-TYPE TAPPING
		R903	ORH4701D622	4.7K 1/10W 5 D.R/TP
		R904	ORH4701D622	4.7K 1/10W 5 D.R/TP
		R905	ORH1000D622	100 1/10W 5 D.R/TP
		R906	ORH0000D622	0 1/10W P-TYPE TAPPING
		R907	ORH0000D622	0 1/10W P-TYPE TAPPING
		R91	ORH0000D622	0 1/10W P-TYPE TAPPING

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R92	ORH0000D622	0 1/10W P-TYPE TAPPING
		R924	ORH0000D622	0 1/10W P-TYPE TAPPING
		R925	ORH0000D622	0 1/10W P-TYPE TAPPING
		R926	ORH0000D622	0 1/10W P-TYPE TAPPING
		R927	ORH0000D622	0 1/10W P-TYPE TAPPING
		R93	ORH4701D622	4.7K 1/10W 5 D.R/TP
		R94	ORH4701D622	4.7K 1/10W 5 D.R/TP
		R950	ORH1000D622	100 1/10W 5 D.R/TP
		R954	ORH2701D622	2.7K 1/10W 5 D.R/TP
		R955	ORH0000D622	0 1/10W P-TYPE TAPPING
		R956	ORH1000D622	100 1/10W 5 D.R/TP
		R957	ORH1000D622	100 1/10W 5 D.R/TP
		R958	ORH1000D622	100 1/10W 5 D.R/TP
		R959	ORH1500D622	150 1/10W 5 D.R/TP
		R960	ORH1500D622	150 1/10W 5 D.R/TP
		R961	ORH1000D622	100 1/10W 5 D.R/TP
		R962	ORH1000D622	100 1/10W 5 D.R/TP
		R963	ORH1000D622	100 1/10W 5 D.R/TP
		R964	ORH1000D622	100 1/10W 5 D.R/TP
		R972	ORH0000D622	0 1/10W P-TYPE TAPPING
		R977	ORH0000D622	0 1/10W P-TYPE TAPPING
		R979	ORH0000D622	0 1/10W P-TYPE TAPPING
		R999	ORH0000D622	0 1/10W P-TYPE TAPPING
		RR70	ORH0000D622	0 1/10W P-TYPE TAPPING
		RR71	ORH0000D622	0 1/10W P-TYPE TAPPING
		RR72	ORH0000D622	0 1/10W P-TYPE TAPPING
		R801	ORKZVTA001D	10M OHM 1/2 W 5% TA52 UL PIL
		R803	ORKZVTA001K	0.47M OHM 1/2 W 5% TA52 PILK
		R806	180-A01B	RW ROUND G 2W 0.11 K TA31(63
		R832	180-A01E	2 W RW ROUND G 2W 0.33J TA31
		RA401	0RRZVTA001A	MNR-14-E0A-J-101 R OHM 100
		RA402	0RRZVTA001A	MNR-14-E0A-J-101 R OHM 100
		RA403	0RRZVTA001A	MNR-14-E0A-J-101 R OHM 100
		RA404	0RRZVTA001A	MNR-14-E0A-J-101 R OHM 100
		RA405	0RRZVTA001A	MNR-14-E0A-J-101 R OHM 100
		RA406	0RRZVTA001A	MNR-14-E0A-J-101 R OHM 100
		RA407	0RRZVTA001A	MNR-14-E0A-J-101 R OHM 100
		RA451	0RRZVTA001A	MNR-14-E0A-J-101 R OHM 100
		RA452	0RRZVTA001A	MNR-14-E0A-J-101 R OHM 100
		RA453	0RRZVTA001A	MNR-14-E0A-J-101 R OHM 100
		RA454	0RRZVTA001A	MNR-14-E0A-J-101 R OHM 100
		RA502	0RRZVTA001A	MNR-14-E0A-J-101 R OHM 100
		RA511	0RRZVTA001A	MNR-14-E0A-J-101 R OHM 100
		RA512	0RRZVTA001A	MNR-14-E0A-J-101 R OHM 100
		RA525	0RRZVTA001D	22 OHM 1 / 16 W 1608 5% R/TP
		RA526	0RRZVTA001D	22 OHM 1 / 16 W 1608 5% R/TP
		RA701	0RRZVTA001A	MNR-14-E0A-J-101 R OHM 100
		RA702	0RRZVTA001A	MNR-14-E0A-J-101 R OHM 100
		RA703	0RRZVTA001A	MNR-14-E0A-J-101 R OHM 100
		RA704	0RRZVTA001A	MNR-14-E0A-J-101 R OHM 100
		RA705	0RRZVTA001A	MNR-14-E0A-J-101 R OHM 100
		RA706	0RRZVTA001A	MNR-14-E0A-J-101 R OHM 100
		RA707	0RRZVTA001A	MNR-14-E0A-J-101 R OHM 100
		R2002	0RD1200H609	120 1/2W 5% TA52
		R2003	0RD1200H609	120 1/2W 5% TA52
		R2101	0RD1001F609	1.0K 1/6W 5 TA52
		R2102	0RD1001F609	1.0K 1/6W 5 TA52
		R2103	0RD5600F609	560 1/6W 5 TA52
		R2104	0RD5600F609	560 1/6W 5 TA52
		R2105	0RD4701F609	4.70K 1/6W 5% TA52
		R2106	0RD5600F609	560 1/6W 5 TA52
		R2107	0RD5600F609	560 1/6W 5 TA52

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R804	ORD0222F609	22 1/6W 5 TA52
		R810	ORD3301F609	3.3K 1/6W 5 TA52
		R812	ORD2200F609	220 1/6W 5 TA52
		R813	ORD1000F609	100 1/6W 5 TA52
		R826	ORD2202H609	22K 1/2W 5 TA52
		R827	ORD2202H609	22K 1/2W 5 TA52
		R829	ORD2700H609	270 1/2W 5 TA52
		R830	ORD2202F609	22K 1/6W 5 TA52
		R834	ORD2202H609	22K 1/2W 5 TA52
		R835	ORD0221H609	2.2 1/2W 5 TA52
		R836	ORD1004H609	1.0M 1/2W 5 TA52
		R842	ORD2702F609	27K 1/6W 5 TA52
		R844	ORD6801F609	6.8K 1/6W 5 TA52
		R867	ORD3901F609	3.9K 1/6W 5 TA52
		R1000	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R101	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R103	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R106	0RH0331D622	3.3 OHM 1 / 10 W 2012 5.00%
		R1120	0RH0222D622	22 OHM 1 / 10 W 2012 5.00%
		R1122	0RH0222D622	22 OHM 1 / 10 W 2012 5.00%
		R1123	0RH0222D622	22 OHM 1 / 10 W 2012 5.00%
		R114	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R1143	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R1147	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R116	0RH2402D622	24K OHM 1 / 10 W 2012 5.00%
		R118	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R126	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R188	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R204	0RH0222D622	22 OHM 1 / 10 W 2012 5.00%
		R205	0RH0222D622	22 OHM 1 / 10 W 2012 5.00%
		R206	0RH0222D622	22 OHM 1 / 10 W 2012 5.00%
		R207	0RH1002D622	10K OHM 1 / 10 W 2012 5.00%
		R208	0RH1002D622	10K OHM 1 / 10 W 2012 5.00%
		R212	0RH0222D622	22 OHM 1 / 10 W 2012 5.00%
		R213	0RH0222D622	22 OHM 1 / 10 W 2012 5.00%
		R214	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R215	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R233	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R234	0RH1002D622	10K OHM 1 / 10 W 2012 5.00%
		R235	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R237	0RH1002D622	10K OHM 1 / 10 W 2012 5.00%
		R238	0RH1002D622	10K OHM 1 / 10 W 2012 5.00%
		R239	0RH1002D622	10K OHM 1 / 10 W 2012 5.00%
		R308	0RH0222D622	22 OHM 1 / 10 W 2012 5.00%
		R323	0RH0222D622	22 OHM 1 / 10 W 2012 5.00%
		R325	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R370	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R372	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R460	0RH0222D622	22 OHM 1 / 10 W 2012 5.00%
		R462	0RH0222D622	22 OHM 1 / 10 W 2012 5.00%
		R603	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R604	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R611	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R612	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R613	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R614	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R615	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R616	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R620	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R621	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R633	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R65	0RH2201D622	2.2K OHM 1 / 10 W 2012 5.00%

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R69	0RH0222D622	22 OHM 1 / 10 W 2012 5.00%
		R703	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R801	0RH1002D622	10K OHM 1 / 10 W 2012 5.00%
		R807	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R818	0RH1002D622	10K OHM 1 / 10 W 2012 5.00%
		R820	0RH0222D622	22 OHM 1 / 10 W 2012 5.00%
		R822	0RH1001D622	1K OHM 1 / 10 W 2012 5.00%
		R839	0RH1002D622	10K OHM 1 / 10 W 2012 5.00%
		R844	0RH1002D622	10K OHM 1 / 10 W 2012 5.00%
		R846	0RH0182D622	18 OHM 1 / 10 W 2012 5.00%
		R847	0RH1002D622	10K OHM 1 / 10 W 2012 5.00%
		R852	0RH1002D622	10K OHM 1 / 10 W 2012 5.00%
		R854	0RH1002D622	10K OHM 1 / 10 W 2012 5.00%
		R876	0RH1002D622	10K OHM 1 / 10 W 2012 5.00%
		R943	0RH0222D622	22 OHM 1 / 10 W 2012 5.00%
		R951	0RH0222D622	22 OHM 1 / 10 W 2012 5.00%
CONNECTOR				
		JA202	6630G15E215	- KSD 15P 2.29MM KCN-DS-3-00
		P3	366-932E	GIL-G-06P LGC 6PIN 2.54MM ST
		P499	366-932C	IL-G-04P LGC 2.5MM S/T STICK
		P702	6602V20005L	2.0MM 12P GIL-S LG CABLE STR
		P801	366-169F	"WAFFER 2MM,7PIN,GIL-S"
		P802	6630VK11512	S12B-PH-SM3-TB JST 12P 2.0MM
		P802	366-169G	2.0MM 8P GIL-S LG CABLE S
		P806	366-921L	GIL-G-12P LGC 12PIN 2.54MM S
		P810	366-932D	GIL-G-05P LGC 5PIN 2.54MM ST
		P2000	6631V20014A	12P 2.0MM 100MM H-B UL1007 A
		P2002	387-A05K	5P 2.5MM 600MM H-B UL 1007 A
		P2101	6631V20010F	8P 2.0MM 350MM H-B UL1007 AW
		P3000	6631V20037G	7P 2.0MM 400MM H-B UL1061 AW
		P806A	387-A15B	12P 2.5MM 150MM H-B UL1007AW
FILTER & CRYSTAL				
		L800	125-123A	FERRITE BFD3565R2F(TAPING)
		L801	6200JB8012Q	OR 14*7*7.5H SMC BK 6.0-11.0
		L802	6200JB8012Q	OR 14*7*7.5H SMC BK 6.0-11.0
		L803	6200JB8012Q	OR 14*7*7.5H SMC BK 6.0-11.0
		RA504	6210VC0004A	BK3216 4S600 TAIYOUDEN 3.2X
		X1	156-A01L	HC49U SUNNY RADIAL 6.000MHZ
		X1501	6202VDT002J	SX-1 SUNNY 13.500000MHZ +/-
		X301	6202VDT002E	SX-1SMD SUNNY RADIAL 2025000
		X501	6202VDT002B	SX-1 SUNNY SC14.3MHZ +/- 30
		X601	6202VDT002H	SX-1 SUNNY 18.432000MHZ +/-3
SWITCH				
		SW1	140-313B	TACT 2LEAD 160G(TA) LG C&D
		SW2	140-313B	TACT 2LEAD 160G(TA) LG C&D
		SW3	140-313B	TACT 2LEAD 160G(TA) LG C&D
		SW4	140-313B	TACT 2LEAD 160G(TA) LG C&D
		SW5	140-313B	TACT 2LEAD 160G(TA) LG C&D
		SW501	6600VR1004A	SKHMPW 5P CHIP TACT J-ALPS
		SW502	6600VR1004A	SKHMPW 5P CHIP TACT J-ALPS
		SW6	140-313B	TACT 2LEAD 160G(TA) LG C&D
		SW7	140-313B	TACT 2LEAD 160G(TA) LG C&D
		SW8	140-313B	TACT 2LEAD 160G(TA) LG C&D





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